Vermont Agency of Transportation



Municipal Assistance Bureau Local Projects Guidebook

For Locally Managed Projects

2014

Municipal Assistance Bureau Local Projects Guidebook Table of Contents

PROGRAM INTRODUCTION	1
PROCESS OVERVIEW	2
PROJECT SET-UP & REQUIREMENTS	
Introduction	
PROJECT ACCOUNT AND AGREEMENT	3
MUNICIPAL SHARE OF PROJECT COSTS	3
INVOICE BILLING	
SELECTION OF A MUNICIPAL PROJECT MANAGER (MPM)	5
SELECTION OF A DESIGN CONSULTANT	6
PROCUREMENT PROCEDURES FOR NON-CONSTRUCTION SERVICES	6
REQUEST FOR QUALIFICATIONS AND PROPOSALS AND SELECTION PROCESS	9
SCOPE OF WORK (SOW)	10
PROPOSAL EVALUATION AND SELECTION	
GRIEVANCE PROCEDURES FOR MUNICIPAL PROJECT MANAGER & DESIGN ENGINEER SOLICITATIONS	11
PROJECT AUDIT REQUIREMENTS	11
RETENTION AND ACCESS OF PROJECT RECORDS	
INITIAL PROJECT SET-UP CHECKLIST	
PROJECT DEFINITION (PHASE A)	14
Introduction	
PROJECT KICK-OFF MEETING	14
SCOPING "ONLY" PROJECTS	14
COMPLETE STREETS & AMENITY POLICY	14
LOCAL CONCERNS MEETING	
PURPOSE AND NEED STATEMENT	
ALTERNATIVE INVESTIGATION	
WORK ZONE SAFETY & MOBILITY GUIDANCE	
TREATMENT OF CONTAMINATED MATERIALS - FEDERAL PARTICIPATION	
RESOURCE IDENTIFICATION REPORT	18
ALTERNATIVES PRESENTATION MEETING	
Preferred Alternative Selection	
MICROSTATION REQUIREMENTS	
CONCEPTUAL (25%) PLANS	19
PUBLIC INFORMATION MEETING	
ENVIRONMENTAL IMPACT RESOLUTION	20
PROJECT DEFINITION (PHASE A) CHECKLIST	
PROJECT DESIGN (PHASE B)	22
Introduction	22
Preliminary (60%) Plans	
UTILITY RELOCATION	
UTILITY REIMBURSEMENT	
PROPERTY OWNER VISITS	24

REEVALUATION OF THE CATEGORICAL EXCLUSION	ON	2 <i>e</i>
ABSTRACT OF TITLE		27
RIGHT-OF-WAY PLANS		27
APPRAISALS		28
APPRAISAL WAIVER VALUATION		28
APPRAISALS REVIEW		28
PROJECT DESIGN (PHASE B) CHECKLIST		34
CONSTRUCTION (PHASE C)		35
· · · · · · · · · · · · · · · · · · ·		
	N SERVICES	
	 TORS	
	TORS	
	TION	
DAVIS DACON ACT	11ON	42

APPENDIX – THIS IS A SEPARATE DOCUMENT FROM THE MAIN TEXT.

PROGRAM INTRODUCTION

The Vermont Agency of Transportation's (VTrans) Municipal Assistance Bureau, through the assignment of administrative and technical staff, works with and supports municipalities in the development of transportation improvement projects. Guidance in areas of Federal and State regulations, standards and processes is provided in this guidebook. Any additional information should be sought through the VTrans Project Supervisor.

The Federal Highway Administration (FHWA) has developed a website with guidance on the development of locally managed federal-aid projects titled "Federal-aid Essentials for Local Public Agencies" which can be found at this link: http://www.fhwa.dot.gov/federal-aidessentials/. It is recommended that municipal project participants, the Municipal Project Manager, design consultants and others with interest in locally managed federal-aid projects visit this site.

MUNICIPAL ASSISTANCE BUREAU LOCAL PROJECTS PROCESS OVERVIEW

MILESTONE	DUTY
INITIAL PROJECT SET-UP	
Grant Agreement	VTrans will draft a Grant Agreement. Upon signing of the Agreement by all appropriate parties, eligible costs may be charged to the project.
VTrans Project Supervisor	A VTrans Municipal Assistance Bureau employee will be assigned to work with the municipality in the development of the project.
Municipal Project Manager (MPM)	A Municipal Project Manager may be selected from qualified municipal employees, a regional planning commission or procured utilizing non-construction procurement procedures.
Design Consultant	A Design Consultant will need to be procured as stated in the respective procurement section of this document.
PROJECT DEFINITION (PHASE A)	
Project Kick-off Meeting	This is a meeting of the municipality, MPM, Design Consultant and VTrans Project Supervisor to discuss the goals and objectives of the project and define the project development process. Project scope, schedule and budget are some of the areas of discussion at this meeting
Local Concerns Meeting	This is the first of three public meetings. This gives local citizens and stakeholders with interest in the project a chance to comment on the potential details and impacts of the project.



Www.icipal Assistance Bureau

Purpose & Need Develop a Purpose & Need Statement so that the needs and goals of the

project are clearly defined.

Alternatives Presentation This is the second of three public meetings. This is when the design

consultant presents the alternatives of the project to the public. The purpose of this presentation is to ultimately select a preferred alternative

for further development.

Conceptual Plans This is the first step in plan development of the preferred alternative.

These plans are approximately 25% of plans development and shall

include a construction cost estimate.

Public Informational Meeting This is the third public meeting. Conceptual plans are presented for public

input, including potential impacts of the project on environmental

resources.

Environmental Document This document details the impacts of the project on resources such as

wetlands, historic, archaeological, etc. as mandated by the National

Environmental Policy Act (NEPA).

PROJECT DESIGN (PHASE B)

Preliminary Plans These are detailed design plans which represent approximately 60% of the

plans development process. These plans will clearly show the limits of construction. A construction cost estimate shall be included in this

submittal.

Right-of-Way (ROW) This is the process during which the temporary and / or permanent

property rights needed for the project are identified and acquired, culminating in issuance of a ROW Clearance Certificate by VTrans.

Final Plans This step represents approximately 85% of plans development. Itemized

quantities and a construction cost estimate will be completed as well as

draft special provisions.

Contract Plans, Specifications and

Estimate (PS&E)

The PS&E package provides the details of constructing the project. The

Contract Plans and Specifications will be used by construction contractors

to bid on the project.

CONSTRUCTION (PHASE C)

Construction This is what everyone has been working towards. The project is bid,

awarded, the contractor breaks ground and the project is built.

Completion and Acceptance The project is completed and the Municipality formally accepts the project

in writing.



PROJECT SET-UP & REQUIREMENTS

Introduction

This is the first step in the process of getting a project ready to be designed and constructed. This section explains how Local Projects are identified, funded and tracked throughout the life of the project. We will talk about selecting a Municipal Project Manager (MPM), one of the most important decisions for the municipality, as well as a project design consultant. The initial project set-up can seem cumbersome at times, yet the choices made within this section may be the most important choices a municipality makes to ensure success of the project. Please refer to the Initial Project Set-Up Checklist at the end of this section.

Project Account and Agreement

The project account will be set-up by the VTrans Project Supervisor once the project has been selected and the Municipality agrees to manage the project. The project will be identified with a project number (ex. STP 0113(23)) as well as a VTrans Project Information and Navigation System (VPINS) project identification number (ex. 14F345). These numbers will be used to manage the projects funding as well as track progression. The funding breakdown will be identified in a project agreement. The project accounting is divided into three phases of funding; Preliminary Engineering (subjob 100), Right-of-Way (subjob 200) and Construction (subjob 300).

The VTrans Project Supervisor will prepare a draft Grant Agreement (GA) for review by the municipality. The GA will detail the relationship between VTrans and the Municipality throughout the project development process. The GA includes specific project details such as project numbers, project description, funding breakdown, etc. Once the GA is acceptable to the municipality and they have provided the required municipal insurance certificate and Project Commitments Form (**Appendix F**), it will be distributed to the appropriate sections within VTrans and then sent to the Municipality for signature. Once all parties have signed the agreement, the project can proceed. Costs incurred by the Municipality prior to execution of the GA are neither eligible for reimbursement nor applicable to the local share.

Municipal Share of Project Costs

The local share (match) of the total project costs, that the municipality must provide, is detailed in the Grant Agreement. The following provides guidance on how to meet the municipality's share:

- 1. Municipality will provide local funds to meet their share of the total project cost.
- 2. Municipalities may use other state funding sources towards the match. In some instances federal funding from non-FHWA sources may be used towards the local share. Please contact the VTrans Project Supervisor for additional details.
- 3. Municipalities may use donated funds, materials, services and real property by a third party which may include an individual, company or association. It is allowable to credit donated municipal and/or State real property towards the municipal share. The property in question, however, cannot be part of the highway system right-of-

way and cannot have been acquired using federal funds. Accordingly, the municipality will need to provide, or secure, in the instance of donated lands, certification that the property in question was not acquired with any federal funds. Materials and/or equipment owned by the municipality and used on the project may be counted as a donation and eligible towards the local match if properly documented or invoiced as a reimbursable expense. A "Donations Eligibility for Credit Against Match" chart has been provided in **Appendix G** to help clarify donations.

Donations are treated the same as incurred costs. The value of the donation is added to the total project cost and is subject to pro rata shares. Donations must be made by the third party after the date the project funding is approved (obligated) by the Federal Highway Administration (FHWA) and prior to approval of final invoices. Donations in excess of the required match cannot be used toward the match on unrelated municipal projects. At no time may the municipality use donations in excess of the municipal share.

To receive credit for donated third party materials and services, the municipality must identify and request the use of the donation toward the local share of the project costs prior to the programming of the federal funding for the particular phase of the project (PE, ROW or Construction) to which the donation will be applied. The request must include the materials or services being donated, the party making the donation, the value of the materials or hourly rate(s) and demonstrate that the value of the donations is appropriate and necessary for the project. Documentation demonstrating this will have to be submitted to VTrans for transmittal to FHWA for their approval. Donations of real property (right-of-way) can take place anytime during the project development process. The fair market value for real property must be established and will be subject to all the rules involved in right-of-way acquisition.

Municipal in-kind services (labor) are recognized by FHWA provided that the services are project eligible costs and the value is determined and approved prior to project authorization. Services provided by a municipality, however, if deemed an appropriate participating cost within the scope of the project, may be reimbursed to the municipality on the appropriate pro rata basis. Invoices for the municipal expenses will need to be submitted to VTrans for review and approval.

The municipality may also request that the value of the donation be applied toward the local share of the project as a "tapered match". Additional information on tapered match can be found on the FHWA website at this link:

http://www.fhwa.dot.gov/legsregs/directives/policy/tapered20091229.htm.

Contact the VTrans Project Supervisor for more information on the "tapered match" process and details.

Invoice Billing

When invoicing VTrans, the invoices must be submitted to the VTrans Project Supervisor in duplicate, an original and one copy. A cover letter signed by the MPM and a municipal representative stating that the invoices have been reviewed and accurately represent work that has been completed must accompany invoices. The cover letter should include the following statement: "We certify that the required local match has not been provided

by contributions from other federally assisted projects or programs.¹" Invoices must include the project name and number, expenditure account (EA), subjob number, and invoice number. This information is provided in the Grant Agreement and invoices must adhere to all terms of the agreement and cannot exceed the maximum limiting amount (MLA) established therein. Please find an example of an invoice/cost submittal in **Appendix A** and the required invoice spreadsheet submittal in **Appendix B**. The invoice spreadsheet is available in electronic format upon request.

Receipts or documentation to substantiate all charges must accompany invoices for charges made by the municipality. Included shall be receipts for lodging, copies of telephone bills with charges highlighted, printing and reprographic log sheets and any other receipts as appropriate. Requests for travel reimbursement expenses should include mileage, mileage rate, and date of travel.

Section 8 of the "Specifications for Contractor Services" in **Appendix E** has additional information on expense documentation and reimbursement.

No premium rate overtime will be reimbursed by VTrans unless prior written approval has been received. Expenses for mileage and meals will be limited to the current approved in-state rates. If not claiming mileage, gasoline may be reimbursed, with receipts required.

Selection of a Municipal Project Manager (MPM)

Municipalities agree to provide project management via a designated Municipal Project Manager (MPM). Specific duties expected of the MPM are detailed in the Grant Agreement. The following provides three choices and direction for the selection of a Municipal Project Manager.

- Municipal Employee or Council / Selectboard Member This may be appropriate when the designated person would be performing these duties without additional compensation, although the municipality may be reimbursed as a project expense. It is expected that the municipality will provide to the Agency justification that the designated person is qualified to assume these duties.
- Contracted with Regional Planning Commission There are instances when it may be appropriate and in the best interest of the municipality to sole source these services to a Regional Planning Commission (RPC). The demonstrated advantage to this course of action would be the organization's familiarity with federal procurement procedures and relevant regulations. These organizations are also well versed in, and committed to, the concept of public participation. If contemplating using the services of the RPC, the municipality will be required to solicit a proposal, review it and provide documented reasons for using these services to the Agency for concurrence.
- **Procured via Competitive Process** Competitive procurement of services is detailed in the section titled "Procurement Procedures, Non-Construction Services". While several choices are offered in this guidance, it is anticipated that procurement of an MPM is likely to necessitate use of the simplified or formal acquisition procurement process. Accordingly, it is anticipated that it will be necessary for the

^{1.} In rare instances, there are exceptions to this requirement. Please contact your Project Supervisor for special circumstances that require authorization.



municipality to prepare both a request for proposal (RFP) and a scope of work (SOW). Both documents are subject to Agency approval. If the MPM is intended for construction oversight as well as project development, be sure to include this in the cost estimate when determining the proper acquisition procedure.

MPM designation rests with the municipality and VTrans will assist the community in the selection process. It is requested that the municipality indicate to the VTrans Project Supervisor its intended course of action. To assist the municipality in the choice of an MPM, it is suggested that several of the following general qualifications be present in any potential candidate:

- Familiarity with applicable state and federal regulations or demonstrated experience with similar regulations.
- Demonstrated experience with public participation and meeting facilitation.
- Demonstrated experience with financial management, particularly with regard to development of individual projects.
- Demonstrated experience with preparing requests for proposals and scopes of work for hiring consultant services, with preparing, executing and managing such contracts and/or experience with similar type procurement.
- Demonstrated experience with construction projects from start to finish, including general oversight.

Selection of a Design Consultant

Selection of a design consultant must be done through a competitive procurement process as detailed below. All perspective design consultants must be on the VTrans qualified list, or found eligible for addition to this list by the VTrans Contract Administration Section, to be considered as a qualified source. A consultant selection committee will need to be formed by the municipality/MPM. In most cases VTrans will not need to participate in the selection as a member of the committee. Supporting documentation of this process is the responsibility of the MPM and shall be provided to the VTrans Project Supervisor.

FHWA has detailed guidance on obtaining and managing consultant services which can be found at this link: http://www.fhwa.dot.gov/programadmin/consultant.cfm.

Procurement Procedures for Non-Construction Services

The following summarizes what municipalities need to do to meet federal regulations regarding non-construction procurement procedures. This summary is meant as guidance and does not replace what is contained in the Code of Federal Regulations (CFR), specifically 49 CFR 18 and 23 CFR 172 as well as US Code: Title 40, Chapter 11, commonly called the Brooks Act.

Responsibility for procuring these services rests with the municipality. Services must always be procured according to state and federal regulations. Accordingly, it is expected that you will confer with VTrans prior to undertaking any action that may adversely affect your project's federal reimbursement eligibility. Municipalities should be prepared to provide detail and documentation of procurement decisions to VTrans.



The type of procurement process is dependent on the services being sought and the anticipated cost of those services. The Brooks Act requires that a qualifications based process be followed for architectural and engineering services. This type of procurement is referred to as QBS or Qualifications Based Selection. What constitutes architectural and engineering services is further defined or clarified in federal regulations as being one of the following: program management, construction management, feasibility studies, preliminary engineering, design, engineering, surveying, mapping, or architectural related services with respect to a construction project. QBS must be used for any contract in excess of \$100,000 per federal regulations. This amount pertains to the total contract amount at the end of the contract, including any amendments to the contract that might occur. Anticipating the possibility of contract amendments, it is expected that the municipality will use a OBS process for architectural and engineering services as defined above if it is estimated that the initial contract amount will be \$65,000 or greater. For non-architectural and engineering services, a small purchase procedure or simplified acquisition process will be used. For architectural and engineering services with an estimate of less than \$65,000, the municipality may choose to use either a QBS process or a small purchase / simplified acquisition process. Details on these processes are detailed below.

OBS PROCESS FOR ARCHITECTURAL AND ENGINEERING SERVICES

The municipality shall solicit services via a Request for Qualifications (RFQ). A Scope of Services will need to be developed and a cost estimate shall be prepared for municipal and VTrans use only. The RFQ solicitation shall clearly state what the basis of selection will be. Awards are made through negotiation with the most qualified firm that offers such services, assuming successful negotiations can be made. A selection committee will review and evaluate each statement of qualifications, based on the established criteria. Firms will then be ranked and either a short list of firms will be interviewed by the selection committee or the highest ranked firm will be selected. If interviews are to be held, firms will be scored for a final ranking. Negotiations with the highest ranked firm begin. If a scope and fee is not agreed upon within a reasonable time, negotiations with the top-ranked firm will be concluded and negotiations with the next highest ranked firm will be initiated. If a satisfactory contract is not worked out with this firm, then this procedure will continue until a mutually satisfactory contract is negotiated. Negotiations cannot resume with a firm after having been concluded at some point in the process.

Following is an outline of the QBS Process:

PLAN	Describe the project needs and goals
	• Identify the selection committee
	• Establish a selection schedule
	• Compile a list of firms for initial solicitation, if desired
	• Prepare an RFQ along with a SOW (and cost estimate for internal use)
	• Distribute the RFQ request **



SELECTION	Evaluate and rank RFQs
	• Inform firms of results.
	NOTE : If a decision can be made based on RFQ, then proceed to NEGOTIATION.
	• Establish a short-list of firms to interview
	• Conduct interviews and rank firms
	• Inform short-listed firms of results
NEGOTIATION	Obtain scope, schedule and fee proposal from highest ranked firm
	Discuss approach, schedule and resources with highest ranked firm
	• Negotiate terms, conditions and fee
	NOTE : If a mutual agreement can't be made with firm, then end negotiations with firm and begin negotiations with the next highest ranked firm.

** In order to ensure competition, the RFQ should be posted by the municipality on the Vermont Bid System webpage which is found at the Vermont Business Assistance Network (VBAN) on the Vermont Agency of Commerce and Community Development website at this link: http://www.vermontbidsystem.com/. The municipality may also choose to post the solicitation in statewide, regional and/or local newspapers or websites. In addition, the municipality may compile an initial short list of firms to whom solicitations are sent.

Contact the VTrans Project Supervisor for any questions or assistance with the posting of the RFQ.

PROCESS FOR NON-ARCHITECTURAL AND ENGINEERING SERVICES

(This process may also be used for architectural/ engineering services if the contract amount is expected to be less than \$65,000)

Estimated Cost of Work	Type of Procurement Procedure
Under \$1,000	Document Choice
\$1,000 to \$15,000	Small Purchase
\$15,000 to \$100,000	Simplified Acquisition
Over \$100,000	Formal Acquisition

• **Document Choice** – The municipality shall document why a particular source was chosen as well as the amount of the services and provide this documentation to VTrans.

- **Small Purchase Procurement** The municipality must solicit price quotations and/or proposals from three or more sources that customarily offer the services. Choice of service providers should not be based solely on cost. Follow-up documentation of this process must be provided to VTrans, to include: a description of the qualifications sought in the solicitation and why the chosen source meets their needs. Also provided should be a description of the prices charged by the sources and an explanation as to why such charges are both cost effective and reasonable.
- Simplified Acquisition Procurement The municipality shall solicit services by requests for proposals (RFP). A scope of services and cost estimate shall be prepared for municipality and VTrans use only. Written proposals from three or more sources that customarily offer these services shall be sought via a request for proposal and/or the RFP can be posted on the VT Bid System webpage as outlined in the RFQ section above. It shall be clearly stated to all sources what the basis of selection will be. Awards are generally made based on technical merit and responsiveness to the scope of services. The comparative costs of the proposals may be considered but should not be the main basis of selection. Follow-up documentation must be provided to the Agency in support of the process and the chosen source.
- Formal Acquisition Procurement This process is similar to the simplified acquisition process but a broader range of applicants must be sought. In order to accomplish this, the municipalities shall post the RFP on the VT Bid System webpage as noted in the RFQ section above. The municipality may also choose to post the solicitation in statewide, regional and/or local newspapers or websites.

REQUESTS FOR QUALIFICATIONS AND PROPOSALS AND SELECTION PROCESS

Requests for Qualifications (RFQ) and Requests for Proposals (RFP) are the documents conveying the solicitation of personal services and generally include the requirements for submission, a brief description of the organization, the expected method of payment, any expectations relative to report/proposal format, specific clauses such as civil rights requirements and the consultant evaluation factors. An example of a RFQ / RFP and SOW can be found in **Appendix C**. Common evaluation factors include:

- Demonstrated understanding of the scope of the project.
- Knowledge of the project area.
- Adequacy of assigned resources.
- Proposed management team.
- Overall firm experience.
- Qualifications and experience of proposed staff.
- Past performance on similar projects.
- Reasonableness of proposed schedule.
- Reasonableness of proposed labor hour estimate (**This factor cannot be used in a QBS solicitation**).



Www.icipal Assistance Bureau

A municipal contact should be identified in the RFQ / RFP and will be the person to answer all questions and receive all proposals. Other than routine questions, all questions must be answered in writing and distributed to all potential proposers. This is to ensure that all proposers have received the same information.

Please refer to your VTrans Project Supervisor with any questions associated with the non-construction procurement process. As with all the procurement procedures, it is expected that documentation will be provided to VTrans in support of all selection processes.

Scope of Work (SOW)

A Scope of Work (SOW) gives the purpose and description of the project. It shall contain a detailed description of the work to be performed, references to all applicable standards, specifications and policies, reporting requirements and expected deliverables. The document prepared must be definitive enough to ensure that the proposing entity clearly understands their obligations while ensuring the municipality will achieve its contracting objectives. An example of a standard RFQ / RFP and SOW can be found in **Appendix C** and for scoping (only) projects in **Appendix D**.

All RFQs / RFPs and Scopes of Work are subject to VTrans review prior to issuing. Be sure to attach the "Specifications for Contractor Services" (**Appendix E**) to the RFQ / RFP and SOW. These will become part of the executed contract with the MPM and/or consulting firm.

Proposal Evaluation and Selection

A consultant selection committee is formed by the municipality/MPM. It should include at least three (3) local or regional (RPC) representatives. A municipal contact person is identified in the RFQ / RFP and will be the person responsible to answer all questions and receive all proposals. Other than routine questions, all questions must be answered in writing and distributed to all potential proposers. This is to ensure that all proposers have received the same information. The RFQ / RFP is then issued, as outlined above, with a specific deadline (date, time & place) when the proposals are due. Late proposals cannot be considered.

Once the proposal deadline has passed, copies of the Technical Proposals will be sent to the selection committee members for them to evaluate. For the non-QBS process, if Cost Proposals were sought, they shall be held unopened by the receiver until the committee meets to discuss the evaluations. In this instance, the Cost Proposals may be opened and examined once the Technical Proposal rankings are discussed. If after evaluation of proposals, there are questions on one or more of the proposals; it may be advantageous to hold interviews with consultants to clarify issues. The selection committee selects a consultant after weighing all information. In some cases the governing board of the community (i.e.: Selectboard, City Council) will need to concur with the recommendation of the selection committee. The municipality then prepares a documentation letter for project files. Municipality also prepares letters informing all proposers of the selection.

The selected consultant must have a current Vermont Agency of Transportation Form AF38 on file with VTrans prior to signing a contract. The AF38 form should be completed at a level commensurate with the anticipated magnitude of proposed work. The AF38 form and any financial information should be submitted directly to VTrans Audit Section.

This information will be kept confidential on file in the Audit Section.

A contract is then prepared, subject to VTrans review and concurrence, then signed by the municipality and the selected consultant. A sample consultant contract can be found in **Appendix H**.

Grievance Procedures for MPM & Design Engineer Solicitations

If the award of the contract aggrieves any proposers, they may appeal in writing to the project sponsor and the appeal must be post-marked within fourteen (14) calendar days following the date of written notice to award the contract. The final decision is to be made by the project sponsor. Language to this effect shall be included in the RFP / RFQ.

Project Audit Requirements

For each municipal fiscal year that federal funds are expended while under agreement with VTrans, the municipality (subrecipient) must be prepared to submit audit information as specified in the Grant Agreement and as follows.

For fiscal years ending before December 25, 2015, a Single Audit is required if the subrecipient expends \$500,000 or more in federal assistance during its fiscal year and must be conducted in accordance with OMB Circular A-133. For fiscal years ending on or after December 25, 2015, a Single Audit is required if the subrecipient expends \$750,000 or more in federal assistance during its fiscal year and must be conducted in accordance with 2 CFR Chapter I, Chapter II, Part 200, Subpart F. The Subrecipient Annual Report is required to be submitted within 45 days, whether or not a Single Audit is required. The municipality shall submit one (1) copy of the audit within nine (9) months of the end of the fiscal year. Upon request, and at no cost to VTrans, audit work papers for the entire project, or, as VTrans may require, will be made available.

If the municipality should expend less the amounts noted above in aggregate federal funds in any single fiscal year, organization-wide financial statements and a schedule of federal financial assistance for VTrans funds only shall be submitted within nine (9) months of the end of the fiscal year. The federal financial assistance schedule will list the funds by title, Code of Federal Domestic Assistance (CFDA) number, pass-through municipal's number, award amount, receipts, and expenditures. At VTrans discretion, it may be required that this information be prepared by a certified independent audit firm.

In the event, an audit or inspection by a certified or registered public accountant or an authorized agent of the State reveals that monies are due from the municipality, the municipality shall pay such sums to the State within thirty (30) days of written notification of the findings of such audit or inspection.

The subrecipient may elect to have a program-specific audit if it expends funds under only one federal program and the federal program's laws regulating grant agreements do not require a financial statement audit of the entity.

The cost of the audit may be eligible for reimbursement to the municipality as a part of the project on a pro-rata share based on the percentage of federal funds expended by the project versus the total federal funds expended by the municipality. In order for the

audit costs to be eligible for reimbursement the selection of the audit firm must comply with the procurement procedures outlined above.

Retention and Access of Project Records

Municipality's will be responsible for retaining all financial and programmatic records, supporting documents, statistical records, and any other pertinent documents for a period of at least 3-years (retention period). The retention period starts on the day the municipality submits to VTrans its last expenditure report. If any litigation, claim, negotiation, audit or other action involving the records begins prior to the expiration of the three 3-year period, the records must be retained until completion of the action and resolution of all issues which arise from it.

VTrans or its authorized representative shall have access to these records in order to make audits, examinations, excerpts and transcripts. The right of access shall last as long as the records are retained. Copies of these documents shall be furnished if requested, at no cost to VTrans.



INITIAL PROJECT SET – UP CHECKLIST

Project Account & Agreement 1. VTrans – sets-up an account for the Project 2. VTrans – prepares & reviews a Grant Agreement 3. Municipality – reviews & signs the Grant Agreement **Municipal Project Manager** 4. Municipality – procures or selects a Municipal Project Manager (MPM) a. Municipality develops a Request for Proposal & Scope of Work to procure a MPM. b. VTrans reviews the Request for Proposal & Scope of Work to procure the MPM. c. Municipality begins the procurement process (advertise and collect proposals). d. Municipality forms a selection committee which evaluates and selects an MPM from the submitted proposals. **Design Consultant** 5. Municipality/MPM – procures a Design Consultant a. Municipality/MPM develops a Request for Qualifications (RFQ) or RFP & Scope of Work to procure the design consultant.

proposals).d. Municipality/MPM forms a selection committee which evaluates and selects a design consultant, utilizing the QBS

(advertise and collect Statement of Qualifications and/or

b. VTrans reviews the RFQ/ RFP & Scope of Work to procure

c. Municipality/MPM begins the procurement process

the design consultant.

evaluates and selects a design consultant, utilizing the QBS process when appropriate.

Initial Project Set-Up is Complete / Project Definition (Phase A) Begins

NOTE: This checklist shows specific milestones and may not include all steps necessary in the development of the project. Please consult your VTrans Project Supervisor for guidance on all necessary steps.



PROJECT DEFINITION (Phase A)

Introduction

While there may be an apparent local area of need as well as an idea of what action should be taken, projects must be developed in an open and collaborative process that ensures that the proposed course of action is transparent and appropriate. This process includes identifying natural and manmade resources in the area and developing safe, efficient and environmentally prudent solutions. All projects are expected to be technically sound, well-designed, cost effective, and compatible with their surroundings and have been developed with input from local citizens. The Agency has developed a Project Development Process chart for your use and information. Please contact your VTrans Project Supervisor for a copy of the chart. The following guidance and overview are meant to highlight this process, necessary for the definition of the project and its limits. Please find the Project Definition (Phase A) Checklist at the end of this section.

Additional information on the Project Scoping process can be found in the "Scoping" section of the "Project Development Phases" of the VTrans Environmental Procedures Manual which is available on the VTrans website at this link:

http://vtransenvironmentalmanual.vermont.gov/env_steps.

Project Kick-off Meeting

A project kick-off meeting shall be held with municipal representatives, the MPM, the design consultant and the VTrans Project Supervisor. The goal of the meeting has three components: first, to answer any project scope, schedule, and budget questions, second to ensure the project will be designed to the appropriate state and federal rules and regulations, and finally to clarify the complex set of design standards, rules, and regulations. It is essential that the project scope, schedule and budget are discussed at this time. This meeting will be organized and chaired by the MPM.

Scoping "Only" Projects

Certain projects are selected for funding for scoping (only) to assist municipalities in determining their options, related impacts and costs to address specific transportation needs. Scoping projects are generally not funded beyond the selection of a preferred alternative and finalization of the scoping report. Municipalities often use the results of the scoping study to apply for funding to bring the project through the construction phase. A sample RFP and SOW for a bicycle and pedestrian project scoping study can be found in **Appendix D** and it provides additional information and details about the scoping process. Additionally a project scoping evaluation matrix can found in **Appendix I**.

Complete Streets & Amenity Policy

In 2011 the Vermont Legislature passed legislation (Act 34) which requires that the needs of all transportation users, regardless of age, ability, or preferred mode of transportation be considered, irrespective of the project's funding source, in state and municipal transportation projects and project phases including but not limited to: planning, design, construction and maintenance. The legislation specifically included municipally managed transportation

1211 S Working to Get You I

projects. The Complete Streets Implementation guidance can be found on the VTrans website at this link:

http://vtransengineering.vermont.gov/sites/aot_program_development/files/documents/publications/Complete%20Streets%20Guidance%20Document.pdf. A sample Complete Streets review memo can be found in **Appendix P**.

The Complete Streets Guidance also contains a copy of the VTrans Policy on Enhancements to Projects (aka Amenity Policy). The Municipality is advised to carefully review this policy as it has specific guidance on project elements which may or may not be eligible for state and federal participation.

The following meetings will require a two week minimum notice or as dictated by the local public meeting requirements: Local Concerns, Alternatives Presentation & Public Informational Meeting.

Local Concerns Meeting

The MPM shall organize and facilitate a local concerns meeting. The project development process will be explained in general terms, a summary of the identified problem(s) and/or condition(s) will be presented and comments and concerns relative to the proposed project will be sought. The purpose of this meeting is not to present solutions but rather better define the problem(s). Any comments and/or concerns arising from this meeting are meant for consideration when proposing a purpose and need statement and corrective course of action. The MPM shall insure that the meeting is properly documented and that the VTrans Project Supervisor is provided a summary of the meeting.

Purpose and Need Statement

After the Local Concerns Meeting, the Design Consultant will prepare a "Purpose and Need Statement" for review. The Purpose and Need Statement is the backbone of project development. A Purpose and Need Statement should not describe a solution. It should be written so that the needs and goals of the project are clearly defined. Without a well-defined Purpose and Need Statement, it will be difficult to determine a reasonable, prudent and practicable alternative and may be impossible to dismiss the no-build alternative.

A Purpose and Need Statement must illustrate that corrective effort is justifiable and worth the expenditure of public funds.

Alternative Investigation

Alternatives must be investigated before a preferred course of action is taken. One of the alternatives studied should be a "no-build" option. Other possible alternatives could be preservation (maintenance), rehabilitation and new construction. Alternatives shall be developed using appropriate design standards, guidelines and specifications. During this phase of project development, all resources in the project area must be identified. These resources shall include as a minimum:

- Wetlands
- Archaeological and Historic



- Section 4(f) Properties
- Fish and Wildlife Habitats
- Endangered/Threatened Species/Unique Natural Areas
- Community Character/Aesthetics/Scenic Resources
- Floodplains
- Agricultural Lands
- Land and Water Conservation Fund Lands (Section 6(f))
- Hazardous Waste Sites
- Rivers, Streams, Lakes and Ponds
- Social Features/Demographic Data, as appropriate
- Potential Impact on Economic Growth and Development
- Conformance to Town and Regional Plans
- Need for a Design Exception
- Stormwater Treatment Options

Projects need to follow the appropriate design standards. In cases where those standards cannot be met there may be a need to pursue a design exception through VTrans.

Additional information on environmental resources can be found in the VTrans Environmental Procedures Manual which is available on the VTrans website at this link: http://vtransenvironmentalmanual.vermont.gov/.

In addition to identifying possible resource impacts, identification of possible permit needs for each alternative shall be made at this time. For those projects that impact the State Highway right-of-way, coordination will be necessary with the District Transportation Administrator (DTA), the VTrans Utilities & Permits Section and the VTrans Hydraulics Section. Initial plans shall be prepared for the proposed alternatives. Please confer with your VTrans Project Supervisor for the appropriate level of detail (examples available upon request). Cost estimates will need to be prepared for each alternative. The results of all the above efforts should be compiled and presented in the form of an evaluation matrix, a sample of which is provided in **Appendix I**. Again, depending on the specifics of your project, changes to this format may be warranted. If you feel that they are, please contact and discuss this with your VTrans Project Supervisor.

Potential impacts to Railroads need to be taken into consideration at this time. Access to active rail lines for survey, engineering or environmental investigations or assessments require special permission and in some cases have additional flagging and insurance requirement. If it is anticipated that any of the proposed alternatives are going to affect a railroad please contact your VTrans Project Supervisor who will coordinate with the VTrans Rail Section.

Work Zone Safety & Mobility Guidance

The Municipality shall address the need for work zone safety and mobility in all plans and documents. This is in response to updates made to the work zone regulations in 23 CFR 630 Subpart J.

Work zone safety and mobility is defined as a need to minimize and manage the work zone impacts of transportation projects. In order to meet safety and mobility needs

during highway maintenance and construction, and to meet the expectations of the traveling public, it is important to analyze and assess the work zone impacts of projects and take appropriate action to manage these impacts.

The overall goal of work zone safety and mobility is to provide optimum safety for workers and the traveling public while maintaining acceptable levels of mobility for the contractor to complete the project work in accordance with their contract.

Goals and Strategies

<u>Goal:</u> To provide a safe work zone which does not increase the existing crash rate for the project area that is under construction.

<u>Strategy:</u> Develop a Transportation Management Plan (TMP) (site-specific traffic control plan) which complies with the Manual on Uniform Traffic Control Devices (MUTCD), state design standards and all applicable specifications.

<u>Goal:</u> To minimize construction - related delays.

<u>Strategy:</u> Construction - related delays will be monitored and a change to the TMP will be required when construction - related delays are encountered.

<u>Goal:</u> To ensure that personnel have the necessary knowledge, skills, and abilities to design and/or implement a TMP.

<u>Strategy:</u> Personnel involved in / with the design and implementation of a TMP must be trained in accordance with their defined roles. Training could include the following: Flagger certification, NHI courses, operations maintenance training, AGC training and Vermont Local Roads Program courses.

Project Classification

Municipality will need to anticipate the impacts associated with individual projects. Most projects will require a TMP. The classification of the project will determine the complexity of the TMP. All transportation projects shall be classified into one of three types of projects: minor, moderate or significant projects. For additional details on classification please see the Work Zone Safety and Mobility Guidance on the VTrans website at the link below.

A project classification shall be identified. This classification must be analyzed periodically throughout the design process to ensure that any design or site changes will not require a classification modification. This classification is used to determine what TMP should be applied to the project.

Additional Guidance

For the complete document on Work Zone Safety & Mobility please see the Work Zone and Mobility Guidance and the Appendix on the VTrans website at these links:



http://vtransengineering.vermont.gov/sites/aot_program_development/files/documents/publications/WorkZoneSafetyMobilityGuidanceDocument.pdf,

 $\frac{http://vtransengineering.vermont.gov/sites/aot_program_development/files/documents/publicatio_ns/WorkZoneSafetyMobility%20Appendix%20A%20-$

%20Temp.%20Traffic%20Control%20Devices%209-12.pdf.

Treatment of Contaminated Materials – Federal Participation

State and Federal funds may, in certain cases, participate in the cost of the removal and treatment of contaminated materials located within the project limits on federally funded projects. However, the municipality must go through an extensive effort to have the polluter be held responsible for the cleanup costs.

If the polluter is not found or is unwilling to take responsibility for the cleanup, then the municipality will be required to develop a request to be submitted to the VTrans Project Supervisor for review and approval of the Federal Highway Administration (FHWA) for participation in the cleanup costs. It is important to note that federal participation in the cleanup costs of contaminated materials will be dealt with on a case-by-case basis and there are no guarantees of state or federal participation.

Resource Identification Report

Prior to the Alternatives Presentation Meeting, the consultant will submit, to the Agency, a Resource Identification Report. The Resource Identification Report should include the project name, description, a summary of all resources that may have an effect on the alternatives, a resource identification map that delineates resource locations and any relevant correspondence. An example is available for viewing at the Agency. Please contact the VTrans Project Supervisor for more information.

Alternatives Presentation Meeting

The outcome of the above efforts must be presented to the community at large to allow for input and comment. This may be accomplished via an agenda item at a select board meeting or an independent public meeting. These meetings should be publicly warned and minutes taken of the meeting. An evaluation matrix, the initial plans and any supporting documentation shall be presented at this time. A sample of an Evaluation Matrix can be found in **Appendix I**.

Preferred Alternative Selection

The desired outcome of the efforts thus far will be the selection of a preferred alternative. Although under the direction of the municipality, the selection will be subject to Agency concurrence. A summary of the material presented at the alternatives presentation meeting and supporting documentation shall be compiled into a document for submission to the Agency. The preferred alternative shall be identified with a clear explanation as to why it is "preferred".

When the estimated construction cost of the preferred alternative is anticipated to be greater than \$1,500,000 or when deemed necessary by the VTrans Project Manager, the proposed alternative will need to be presented to the Municipal Assistance Bureau Director for a recommendation to the Chief Engineer and Agency Secretary for approval. Additionally when the construction cost of the project significantly increases there may be a requirement for review by the Director.



Contact the VTrans Project Supervisor for more information on this process.

MicroStation (CADD) Requirements

The Municipality will be required to utilize the most recent version of Bentley Systems MicroStation engineering design (CADD) software when the proposed project will have a "significant" impact on the state highway right-of-way or involve a bridge greater than 20 feet in length. VTrans has developed this requirement to ensure that the electronic files are compatible with the Agency's archival system.

The VTrans Project Manager will make the final determination as to whether or not the project will have a "significant" impact on the state highway right-of-way.

If the project will not have a significant impact on the state highway right-of-way, then the type of engineering design software will be at the discretion of the municipality.

It is important to note that other types of engineering design software are not easily converted into MicroStation format. When the municipality is required to use MicroStation, it is imperative that the design engineer develop all design files utilizing the MicroStation software.

Please contact the VTrans Project Supervisor if you have specific questions related to the use of MicroStation.

Conceptual (25%) Plans

Once the preferred alternative has been approved, work can begin on developing conceptual plans. Generally, these plans are based on a three dimensional survey and include the following elements as a minimum:

- Title Page
- Typical Sections
- Base Plan and Profile Sheets showing the Project Centerline, approximate Construction Limits and existing right-of-way delineation
- Plotting and Identification of any identified resources
- Cross Section
- Channel Sections
- Pavement Structure Thickness Design as appropriate
- Conceptual Traffic Control as appropriate
- Clear zones
- MicroStation requirements as noted above.

Once the MPM has ensured that all the appropriate elements have been addressed, the plans, supporting documentation and construction cost estimate shall be submitted to VTrans for review and comment.

Public Information Meeting

The Municipality will hold a public informational meeting to present the conceptual plans. The MPM will provide the VTrans Project Supervisor a written copy of the meeting minutes and any additional information presented at this meeting for the Agency's records.

Environmental Impact Resolution

All projects are responsible for meeting the requirements of the National Environmental Policy Act of 1969 (NEPA). There are three classes of actions, which prescribe the level of documentation required in the NEPA process.

- Categorical Exclusion (CE)
- Environmental Assessment (EA)
- Environmental Impact Statement (EIS)

Generally, most local projects will fall into the Categorical Exclusion (CE) level of documentation. The following is pertinent to development of a CE. As a general definition, CE's involve actions that:

- do not induce significant impacts to planned growth or land use for the area
- do not require the relocation of significant numbers of people
- do not have a significant impact on any natural, cultural, recreational, historic or other resource
- do not involve significant air, noise or water quality impacts
- do not have significant impacts on travel patterns
- do not otherwise, either individually or cumulatively, have any significant environmental impacts

Additional information on the NEPA process can be found in "Conceptual Design" section of the "Program Development Phase" and in the "NEPA" section of the "Permitting Programs" in the VTrans Environmental Procedures Manual which is available on the VTrans website at this link: http://vtransenvironmentalmanual.vermont.gov/env_steps. This includes a "Programmatic Categorical Exclusion Criteria" checklist which will need to be filled out according to the type of project, some projects will require more information than others (see 23 CFR 771.117(c)). It is not the intent that the MPM fill this out using his or her own interpretations of environmental impacts, rather it is expected that resource professionals in the individual areas will be contacted for their determination of impacts. Not all permits need to be "in hand" at this point; rather it should be identified which permits will be necessary. An overview of State and Federal Environmental Laws and Regulations can be found in "Permits and Coordination" section of the VTrans Environmental Procedures Manual" at this link:

http://vtransenvironmentalmanual.vermont.gov/permit progs/permits. A "Permits Needed Checklist Memo Template" and copies of both a programmatic and non-programmatic categorical exclusion template can be found on the VTrans website at this link: http://vtransenvironmentalmanual.vermont.gov/templates.

Once the Categorical Analysis sheet has been filled out and signed by the person preparing it, it and all supporting documentation, including the Conceptual Plans, will need to be submitted to the VTrans Project Supervisor. The Project Supervisor will forward it to VTrans Environmental Section for their review and concurrence. If additional information or clarification is necessary, the MPM will be contacted and asked to provide it. Once concurrence is received, VTrans will complete the process with the Federal Highway Administration (FHWA) which formalizes the project as "categorically exempt".

Completion of all the above steps will signify the end of the project definition process (Phase A). The MPM will be notified in writing that they are authorized to proceed the next stage of project development.



PROJECT DEFINITION (PHASE A) CHECKLIST

<u>Purpo</u>	se and Need	
1.	Hold a Kick-off Meeting	
2.	Hold a project Local Concerns Meeting	
3.	Develop a Purpose & Need for the project	
4.	Review and accept the Purpose & Need	
Altern	natives Investigation	
5.	Investigate and evaluate alternatives for the project	
	 (a) review environmental resources (b) prepare alternatives with footprints (c) prepare evaluation matrix (d) coordinate with resource agencies (e) hold a public alternatives presentation meeting (f) select a preferred alternative 	
6.	Endorse the preferred alternative & produce final scoping report.	
Conce	eptual Plans (not applicable to scoping "only" projects)	
7.	25% plan development (Conceptual Plans) are complete	
	(a) submit conceptual plans(b) complete the federal environmental document (CE)(c) ascertain the need for state and federal permits	
8.	Hold a public informational meeting to present conceptual plans	
9.	Review and approve in writing the conceptual plans	
Environmental Document (not applicable to scoping "only" projects)		
10	. Review and approve the environmental document (CE)	
11	. VTrans gives Authorization to Proceed	
Project Definition (Phase A) is Complete / Project Design (Phase B) Begins		

NOTE: This checklist shows specific milestones and may not include all steps necessary in the development of the project. Please consult your VTrans Project Supervisor for guidance on all necessary steps.



PROJECT DESIGN (Phase B)

Introduction

At this point in project development, conceptual plans and the federal environmental document (CE, EA, EIS) have been completed. You should have requested and received authorization from VTrans to proceed. Do not proceed any further until authorization to proceed is in hand as it could jeopardize the federal funding. The following steps are meant to be in a logical progression but some of the steps may overlap with others. Check with your VTrans Project Supervisor for clarification. Please find the Project Design (Phase B) Checklist at the end of this section.

The Federal Highway Administration (FHWA) has developed detailed guidance on the requirements to develop and administer construction contracts. A number of aspects of this guidance must be taken into consideration during Project Design (Phase B). The FHWA "Contract Administration Core Curriculum" can be found at the following link and both the MPM and the Design Consultant are encouraged to carefully review this material: http://www.fhwa.dot.gov/programadmin/contracts/coretoc.cfm.

Preliminary (60%) Plans

VTrans does not generally require a submittal for review at this point, but it is essential that plans be developed to this stage in order to initiate contact with any affected utility companies and obtain any necessary project permits. This level of plan development is essentially equivalent to the VTrans designated "preliminary plan" stage. At this stage in development, the following features are designed and shown on the plans: width and depth transitions, roadside barriers, cut-to-fill transitions, drives, intersection highway approaches, drainage, erosion prevention and sediment control, traffic signs, pavement markings, street lighting, signalization and detours. All cross sections should be included, showing existing and proposed (below and above ground) features, drainage and utilities. Construction limits and notes should be placed on the plans sheets. In addition, an itemized quantity sheet should be developed and included in the plans.

Geotechnical investigations should be made at this point when applicable, such as when there may be a need for a cofferdam, design of structural foundations or when potential contaminated soils were identified during the project definition phase. If contaminated soils are determined to be present in the project area, the MPM needs to notify the VTrans Project Supervisor and discuss the best manner in which to proceed. Generally, the cost of removal and treatment of contaminated materials are not eligible for state or federal participation.

An itemized construction cost estimate, based on the Preliminary Plans, shall be prepared and a copy provide to the VTrans Project Supervisor.

Utility Relocation

The following procedure outlines how to move forward in resolving utility issues. Consideration should be made to accommodate present and future utility installations within the project corridor. If there are unusual circumstances connected with your project or the following does not completely answer your questions, contact the VTrans Project Supervisor, who will direct you to the appropriate person in the VTrans Utilities and Permits Section. The Utilities and



Permits Section is willing to provide guidance and assistance to communities when dealing with utility related issues.

For those projects requiring utility relocation within the State highway right-of-way, coordination must be made with the VTrans Utilities & Permits Section as they will be preparing the Utility Relocation Agreement(s) for this relocation work. The plans should not be provided to the affected utility companies until such time as this coordination has taken place.

Existing right-of-way limits and appropriate clear zones need to be clearly delineated on the plans. The clear zone for a project delineates the area outside of which aboveground utility facilities must be located on a project. Preliminary plans should be provided to all affected utilities with a request that all existing utility facilities be plotted or their locations verified. The utility companies shall also be requested to provide a relocation route outside the clear zone. The Agency recognizes that a plan submittal at this point in project development is not generally required for review by VTrans; however, it is important that the utility companies be provided with plans at this time in project development. The utility company should advise the municipality if it owns the property, has an easement or some other interest not terminable at the will of the property owner on the land where the utility facility is located as this will affect if the utility can be reimbursed for the relocation (see Utility Reimbursement section below). If it appears that the relocation will be eligible for reimbursement, the utility company shall also prepare a cost estimate. The utility company shall be apprised of a two-month deadline for these efforts.

Upon receipt of the above requested information, the municipality shall review and summarize the material and provide VTrans with a statement for concurrence that the utility relocations are eligible for federal reimbursement. If any acquisitions are necessary for accommodation of the relocation route, the utility company(s) shall be informed that they may need to be available for any condemnation proceedings. There are times when Utility right-of-way costs are eligible for reimbursement. Please contact your VTrans Project Supervisor so that a meeting can be set up with the Utilities & Permits Section.

The municipality shall prepare any utility agreements necessary for the project, subject to VTrans review. Utility agreements are appropriate where there will be reimbursement; if there will not be any reimbursement, the municipality may follow their own permit process or document the situation in writing for concurrence by the utility company.

The municipality shall provide VTrans with executed copies of any utility agreements along with a statement attesting that the above procedure has been followed.

The municipality shall use a "shell" Utility Relocation Agreement. If any changes to these are made, the changes shall be identified when submitting for review. The "shell" agreements in the appendix are for the following:

- Relocation work eligible for reimbursement with federal funds (Agreement A, **Appendix M**).
- Relocation work not eligible for reimbursement but is included in the construction



contract, the utility company will reimburse the municipality (Agreement B, Appendix N).

Some projects may require both types of work or unusual combinations of work. Agreements may need to be modified to cover these situations. In addition, a Utility Relocation Checklist is provided for your use and information in **Appendix O** to help ensure that all the proper procedures have been followed.

It should be noted that the MPM or Design Engineer will be required to certify in writing that the utility coordination has taken place.

Utility Reimbursement

Statutory clarification may be found in: 19 VSA 1703, 19 VSA 1605 and 30 VSA 2502 relative to when it is allowable to reimburse Utility companies for relocation of facilities as a result of highway construction. The following guidance is offered for project construction on **non-limited** access highways:

- Utility facilities that require relocation due to project construction may **not** be reimbursed unless the utility company owns the property, an easement or some other interest not terminable at the will of the property owner. If this is the case, fees are reimbursable and incorporated into a utility agreement with invoices submitted to VTrans by the municipality.
- Municipal utilities located within municipally controlled rights-of-way may be reimbursed for any necessary relocation.
- Utility companies whose facilities require relocation for unusual circumstances such as converting aerial facilities to underground because of environmental considerations, non-discriminatory local ordinances, safety considerations or others deemed appropriate by VTrans, may be reimbursed.

In general, should project construction or reconstruction occur within the confines of a **limited** access highway, relocation costs are reimbursable unless otherwise excluded by permit or agreement.

If in doubt, please contact your VTrans Project Supervisor with the pertinent facts.

When the Utility coordination is complete a Utility Clearance Certificate (**Appendix S**) will need to be filled out, signed and a copy provided to the VTrans Project Supervisor.

Property Owner Visits

Upon receipt of information from any affected utility companies, the MPM ensures that any relocation routes are incorporated into the plans. Property owner visits may at this time be scheduled to explain the project and its impact on their property. It is suggested that the design engineer and affected utility company representatives participate in these property owner visits.



Permits

Permits or sign-offs need to be obtained at this point in the project development process. Most of the agencies will want to see the detailed design plans before issuing any permits or signing off on the project. Permits may include:

- Stormwater Discharge Permit
- Construction General Permit (NPDES)
- Stream Alteration Permit
- State Wetlands Permit
- Lakes & Ponds Permit
- Section 401, Water Quality Certificate
- Threatened & Endangered Species
- Section 404, US Army Corps of Engineers Permit

An overview of State and Federal Environmental Laws and Regulations can be found in "Permits and Coordination" section of the VTrans Environmental Procedures Manual" at this link: http://vtransenvironmentalmanual.vermont.gov/permit_progs/permits. A "Permits Needed Checklist Memo Template" can be found on the VTrans website at this link: http://vtransenvironmentalmanual.vermont.gov/templates.

Additional information on the environmental permitting process can be found in "Preliminary Design" section of the VTrans Environmental Procedures Manual which is available on the VTrans website at this link: http://vtransenvironmentalmanual.vermont.gov/.

Access Permits:

Municipality and/or utility company shall apply for and obtain a Highway Access Permit (a.k.a. Permit for Work within State Highway Right-of-Way or Section 1111 Permit) prior to the commencement of any construction within the state highway right-of-way. Permits for work within the state highway right-of-way shall be obtained from the Chief of Utilities & Permits, Vermont Agency of Transportation (VTrans).

Drive Permits:

Municipality is required to obtain drive permits for any driveway within the state highway right-of-way which is modified by the Project. Drive permits are used to keep track of private access points to the state highway right-of-way.

It should be noted that the VTrans Utilities & Permits Section will not issue the access and drive permits until they have reviewed and approved the final (85%) plans.

Additional Guidance:

Municipality or design engineer should contact the VTrans Project Supervisor to obtain a hardcopy of the permit, instructions on how to fill out the permit and for the required special conditions.



Www.icipal Assistance Bureau

Re-evaluation of the Categorical Exclusion

A CE re-evaluation is required if it has been more than 3-years since the original CE, or subsequent re-evaluations, and the project is entering its next "Major Action." Major Actions after Preliminary Engineering has been authorized and CE has been prepared are: Final Plans (usually follows CE so closely that there is no need to re-evaluate at this milestone); ROW (Right-of-way work begins after issuance of original CE, however ROW cannot make offers etc. until project has been re-evaluated); Contract Plans/PSE Plans; Construction. The objective of the re-evaluation is to ensure that the project is still the same as when it received the original CE.

Any changes to the project scope, construction limits, impacts or to any proposed mitigation since issuance of the Categorical Exclusion will need to be documented and submitted to the VTrans Project Supervisor for forwarding to the Agency's Environmental Section. It is worth noting that changes to the project or a time frame greater than three years since the Categorical Exclusion was approved, will necessitate re-evaluation of the Categorical Exclusion by VTrans and the Federal Highway Administration.

Right-of-Way Acquisition

You are ready to enter this phase of the project development process if you have the following:

- Current Environmental Document (CE, EA or EIS)
- ROW authorization and ROW funds allocated

The Federal Highway Administration has the responsibility of ensuring that property owners affected by federally funded transportation projects are afforded due process in acquisition with just compensation and that public monies are spent in a reasonable and accountable manner. All Right-of-Way acquisition must follow the requirements of the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" (commonly known as the "Uniform Act"), as amended in 49 CFR – Part 24.

The Municipal Assistance Bureau has a detailed "Right-of-Way Guide" for Municipalities which can be found on the VTrans website at this link: http://vtransengineering.vermont.gov/sections/ltf/general/guidebook.

As specified in the executed Grant Agreement, responsibility for ensuring that the provisions of the "Uniform Act" are met rest with the municipality. The following guidance is provided to assist you. In situations where the right-of-way issues appear to be complex and/or displaced persons or businesses require relocation assistance, there will need to be additional guidance and/or assistance sought from VTrans.

In general, the likely scenarios for right-of-way acquisition may include:

- purchase of needed land for improvements in fee
- purchase of permanent or temporary easements
- donation of property and rights by affected property owners



It is essential that property owners understand that it is always their right to receive just compensation. Any necessary condemnation of property and any ensuing disputes will be the responsibility of the municipality. Property owners always have the right to:

- Have necessary land, improvements and easements appraised (when the value exceeds \$10,000) and to receive just compensation, which may not be less than the approved appraisal or valuation waiver value. The property owner is entitled to a written statement and summary of the amount established as the "just compensation" value. This should be accomplished as expeditiously as possible.
- Accompany or have a designated representative accompany the appraiser during any inspection of their property.
- Challenge the just compensation determination.
- Receive payment of the agreed upon purchase price or condemnation award before surrendering possession of the property.
- Reimbursement for expenses incidental to transfer of title to the municipality.
- At least a ninety day written vacating notice if the property is improved with structures or if personal property needs to be vacated. Incidental to this may be relocation services and payments.

The Federal Highway Administration (FHWA) has guidance on the right-of-way acquisition process which can be found at this link:

http://www.fhwa.dot.gov/federal-aidessentials/catmod.cfm?category=rightofw .

An overview of the process follows in the order of events that must occur.

Abstract of Title

An abstract of title is required for all acquisitions. This will require, as a minimum, a copy of the current owner's deed and encumbrances such as mortgages, liens and any attachments. Legal title documents need to include the title source and address the project needs as to each owner and clear the land and/or rights to be acquired of all encumbrances when required.

Right-of-Way Plans

to moving to the appraisal stage.

ROW needs must be represented on project plans or separate ROW plans. It is recommended that the affected property owners be contacted prior to the preparation of ROW plans to discuss the effects of the project, confirmation of the title abstract data and details relating to water and sewer systems, property line locations, driveways, etc. The plans should show the proposed centerline of the project, existing ROW limits, construction limits and the proposed "taking line". It is very important to remember that any property impacted temporarily during construction must be included in the right-of-way plans. Details within the "take area" should be shown relative to any existing property improvements such as buildings, water sources, water or sewer lines, septic tanks, etc. ROW Plans need to show parcel numbers, full property owner's names, areas to be acquired and rights to be acquired. ROW plans shall be submitted to VTrans

Please be aware that if the area of affect for the project has changed since the Federal

for review and comment. Agency comments will need to be addressed by the municipality prior



Environmental document (CE, EA, EIS) was approved a re-evaluation will be required before the formal acquisition of property can begin.

Appraisals

All appraisal work must be done by a VTrans prequalified appraiser. The list of these appraisers is continually being updated. A copy of this list is available on the VTrans website or will be provided to you upon request. The fees of the appraiser must be reasonable and not on a percentage basis. As prequalified personnel will be used, an in-depth discussion about appraisal format will not be provided here. It is important that there is compliance with several essential items. As with all procurement of services using federal funds, procurement of appraisal services must be done competitively. Refer to the guidance on this topic. The competitive process must be followed except in the instance when the appraisal services were part of the engineering design consultant's initial proposal to the municipality. The appraiser cannot have any interest, either direct or indirect, in the property being acquired. Also, please be reminded that the owner or a designated representative of property being acquired must be given the opportunity to accompany the appraiser during any inspection of the owner's property. The municipality must inform the appraiser that reports must conform to the VTrans ROW Manual-Chapter IV, Appraisal. It is recommended that the fee appraiser contact the VTrans ROW Section prior to commencing the appraisal work. The appraiser will provide the estimate of fair market value of the property or property interest to be donated if it is needed. Appraisals will be made of donated property, or any portion thereof, if the municipality seeks a local share credit and/or the property owner seeks services rendered that will benefit the property owner. The municipality may only seek local share credit for the difference between the appraisal and the value of services rendered to the property owner to receive credit for their local share. If the property owner releases the municipality from their obligation to secure an appraisal in writing, an appraisal of donated property does not need to be done. Anyone donating property must be informed by the municipality of their right to receive just compensation.

Appraisal Waiver Valuations

When the estimated value of the property being acquired is \$10,000 or less it is possible to use an appraisal waiver valuation. One of the benefits of the appraisal waiver option is that allows appraisers to focus on addressing the more complicate valuation assignments. The person performing the appraisal waiver valuation must have sufficient understanding of the local real estate market to be qualified to make the waiver valuation. The use of an appraisal waiver valuation is an option for the acquiring agency. It is not mandatory.

Additional information on appraisal waiver valuations can be found on the FHWA website at this link: http://www.fhwa.dot.gov/everydaycounts/projects/toolkit/multimedia/appraisalwaiver.pdf.

Appraisals Review

All appraisals must be submitted to the VTrans reviewing appraiser for determination of fair market value. VTrans will provide the review appraisal on all projects. In the event that the reviewing appraiser has concerns with the original appraisal, the appraisal can be returned to the appraiser for necessary adjustments. Once the reviewing appraiser is satisfied with the appraisals he or she will issue a listing of the fair market value determinations. As part of this process, the reviewing appraiser may determine that all or part of a remaining property may be an "uneconomic remnant". An "uneconomic remnant" is a remainder that has

1211 S Working to Get You T

been substantially damaged and has little or no utility or value to the owner because of the project's impacts. Under the Uniform Act, it is required that the municipality offer to purchase such remnants.

Negotiation

Once fair market value is determined, negotiations with property owners may begin. An appraiser who has appraised a property shall not act as a negotiator on the same property. The negotiator must keep records of negotiations on a per parcel basis. The record shall be in writing and completed after each contact with a property owner. The record for each contact shall include as a minimum: the date and time of the contact, with whom offers are made (dollar amounts), counteroffers, reasons why a settlement could not be reached and any other pertinent information. The report shall be signed and dated by the negotiator. There may be instances where an acquisition settlement is proposed in excess of the approved fair market value. This is referred to as an "administrative settlement". Approval of an administrative settlement will need to be obtained from VTrans prior to execution of any binding documents in order to remain eligible for state and federal participation. Any settlement amounts greater than fair market value and/or an approved administrative settlement will be the responsibility of the municipality.

During the negotiations, the municipality must put forward its fair market value offer in written form and each property owner must be provided with a written statement of the approved amount established and a summary of the basis for the offer. When only a portion of the owner's property is being acquired, the statement must include both the amount of compensation being offered for the property being acquired and the amount for damages or loss in value to the remaining property if damages are involved per 49 CFR §24.102(d)(e). If the acquisition involves an uneconomic remnant as previously described, the municipality must offer to purchase it but the owner has no obligation to sell it nor can it be condemned. Except in instances where only temporary easements are required, the acquisition must include not only the owner's interest in the property but also the interest of any mortgagees, lessees, lien holders or other parties. When property is donated, the acquisition document must contain a waiver of the owner's right to an appraisal and to just compensation.

If the negotiator is unable to reach a settlement with the property owner, the municipality will need to assume the responsibility as the condemning authority and is subject to all the applicable sections of Title 19 V.S.A. **Appendix Q** contains information developed by the VTrans Right-of-Way Section providing details of the municipal condemnation process. It is expected that the municipality will have legal representation during this process. All legal fees must be determined to be reasonable and not on a percentage basis. The attorney used must have qualifications and experience in areas of property law and all legal work must be done in accordance with Vermont Statutes and 23 CFR §710.00.

If any commitments are made to the property owner, other than a cash settlement they must be in writing and must be approved by the Agency. Again, further discussion with VTrans will clarify this.

Should the project require the displacement of any person, business, farm or non-profit organization, either in whole or in part, the municipality shall seek assistance from the VTrans Right-of-Way Section.

Certification

The municipality must issue a certified statement to VTrans that all Right-of-Way, including control of access rights, as well as legal and physical possession, has been acquired in accordance with the State regulations and the Uniform Act. The Right-of-Way Certification Letter, an example of which can be found in **Appendix R**, must be signed by the municipal attorney. If any special ROW agreements were made, they need to be included in a certification package as well as final ROW plans with changes noted, appraisals, fair market value certificate, mortgage releases, easements and acquisition documents. VTrans will then issue the final ROW certificate to the Federal Highway Administration.

Historic Rights-of-Way

There are many highways in Vermont which have a "historic" ROW. This ROW was established when the road was first laid out, at some width greater than the statutory presumption of three rods (49.5 feet). Many historic ROWs are four rods (66 feet) or six rods (99 feet) in width, although other dimensions are occasionally found. It is important to note that historic ROWs were typically laid out in the late 1700's and early 1800's and that the roadway alignment found today may no longer be located within the center of the original ROW.

If a municipality chooses to request consideration of use of a historic ROW, it will need to obtain the services of a surveyor to research the historic ROW location relative to the current highway alignment. The research work would include review of available documentation in coordination with the ROW and Survey Sections of VTrans. Once the historic ROW is established, it should be plotted on the project plans for review and approval by VTrans. After review and approval, the results should be shared with the abutting property owners during the property owner coordination phase of project development. Should a property owner challenge the historic ROW, the municipality can approach the property owner to determine if they would be willing to allow the municipality to use the area in dispute by the use of a quit claim deed. This deed would need to be worded without prejudice to the claims of the State and would need to be taken as a donation. If neither of these requirements can be met or the owner is not willing to offer a quit claim deed to the municipality, the municipality would have to defend the historic ROW when on town highways and work in conjunction with the State in the defense of the historic ROW when on State highways. This involves a Resurvey Process as is outlined in VSA Title 19 Chapter 32 in which the municipality/State documents the historic ROW. The process includes property owner notification, boundary survey and an opportunity for property owner appeals.

There are no definitive answers early in the project development stage when considering the use of historic highway ROW. Municipalities need to be aware that there are inherent risks, in both time and money, in pursuing the use of historic ROW. Special consideration needs to be given to those risks during the project scoping and alignment selection process. Should the municipality decide to proceed with the project within a historic ROW, they will need to work closely with VTrans.

Current Land Use Program

Property that is registered under the Current Land Use Program that needs to be acquired by easement or a taking must be withdrawn from the Current Land Use Program. The withdrawal of this property, because of its use for development purposes, would be cause

for a penalty to be charged. The penalty charge is reimbursable as a project cost. The penalty will be waived if the property is taken by eminent domain.

Railroad Agreements

For those projects that are going to affect a railroad a railroad agreement is going to be needed. These can take time to obtain and will require coordination with the railroad which is typically done through the VTrans Project Supervisor and the VTrans Rail Section. There are specific railroad related contract provisions and insurance requirements that will need to be included in the project plans and specifications. Please contact the VTrans Project Supervisor for guidance on this topic.

Material / Product Selection

It is not allowable to exclusively specify "brand name" (patented/proprietary products) or include material specifications that are so restrictive that they essentially require the use of specific "brand name" products on a federal-aid project unless a Public Interest Finding (PIF) request has been submitted and approved by VTrans. It should not be expected that permission will be granted unless the specified product can be shown to be essential for synchronization with existing highway facilities (i.e. compatible traffic signal equipment in a coordinated system), is necessary due to environmental/historic requirements (i.e. certain style street light poles required to be used in a historic district) or there is not any equally suitable alternate in existence. Additional guidance on material selection and Public Interest Findings for patented/proprietary products can be found on the FHWA website at these links:

- http://www.fhwa.dot.gov/construction/cqit/findings.cfm
- $\bullet \quad \underline{http://www.fhwa.dot.gov/federal-aidessentials/catmod.cfm?id=68} \; .$

Final (85%) Plans

Final Plans incorporate any changes required by permitting process, the right-of-way acquisition process and final utility relocation. Right-of-Way plan sheets need to be included and clearly show the proposed acquisition lines. These plans are considered to be firm regarding detailed design purposes.

These plans, along with an updated listing of items, quantities, cost estimate, specifications and special provisions shall be submitted to VTrans for review and comment. The specifications shall include material testing and sampling requirements. For additional information on this topic, please refer to the Material Sampling, Testing and Certification section in the Construction Section (Phase C) of this Guidebook.

Contract (100%) Plans

Contract plans will incorporate any changes that have occurred since the review and acceptance of the Final (85%) plans. All changes should be documented by the MPM and submitted to the VTrans Project Supervisor. Contract plans, specifications (special provisions) and final estimate (P,S&E) will be formalized at this point. The VTrans Construction Manual, available on the VTrans website, should be used for referencing during the development of the contract plans and specifications.

Upon completion of the Contract Plans, the design consultant should review all project



documents and assemble the final submittal package for VTrans review. The Environmental Document should be current (less than three years old). All right-of-way should be cleared and the right-of-way certificate should be in hand. All applicable permits must be obtained and accounted for using the Permits and Clearance Checklist in **Appendix X**. The project specifications and estimate should be reviewed and enclosed in the submittal package. The Design and Utility Clearance Certificates, examples of which can be found in **Appendix S**, should be filled out, signed and a copy provided to the VTrans Project Supervisor. It is important to develop a detailed construction cost estimate. This estimate shows the specific materials (bid items), quantities of each and estimates the total cost. Included in this estimate should be an amount for contingencies and the estimated costs for construction engineering services. Construction engineering would include inspection, material testing and certification, shop drawing review, field engineering and project administration costs.

Formal authorization to proceed with the construction phase, including obligation of the federal funds for construction, will need to be obtained from FHWA by VTrans before the municipality will be allowed to advertise for construction bids. Accordingly, the municipality will need to allow sufficient time in their project schedule for this to take place. Construction procurement documents may be prepared in the interim for VTrans review and comment.

Oversight by Municipality

As detailed in the Grant Agreement with VTrans, the municipality has agreed to provide the necessary oversight of the project, including inspection and sampling/testing of construction materials. Some municipalities already have the necessary expertise to provide these services "in-house" while other municipalities will need to procure these services from outside sources. As noted earlier, obtaining contracted services must be done using an open and competitive process (see Procurement Procedures – Non Construction Services). The project design consultant may not oversee the construction of the project if the construction estimate is greater than \$250,000. The project design consultant, in most cases, should be available to provide design-engineering services (shop drawing review, address field changes, attend final inspection, etc.) during the construction phase.

To assist the Municipality in obtaining the services of a Construction Inspection firm a sample RFP and RFQ can be found in **Appendix Y**.

The Federal Highway Administration (FHWA) has guidance on "Supervisory Agency Requirements" which can be found at this link: http://www.fhwa.dot.gov/federal-aidessentials/catmod.cfm?id=80

One final consideration before requesting the obligation of the federal construction funds is to identify any anticipated donated materials or services for the construction phase. To receive credit for donated third party materials and services; the municipality must identify and request the use of the donation toward the local share of the project costs prior to the programming of the federal funding for Construction Phase. The request must include the materials or services being donated, the party making the donation, the value of the materials or hourly rate(s) and demonstrate that the value of the donations is appropriate and necessary for the project. Documentation demonstrating this will have to be submitted to VTrans for transmittal to FHWA for their approval. Donations of real property (right-of-way) can take place

anytime during the project development process. The fair market value for real property must be established and will be subject to all the rules involved in right-of-way acquisition.

Municipal in-kind services (labor) are recognized by FHWA provided that the services are project eligible costs and the value is determined and approved prior to project authorization. Services provided by a municipality, however, if deemed an appropriate participating cost within the scope of the project, may be reimbursed to the municipality on the appropriate pro rata basis. Invoices for the municipal expenses will need to be submitted to VTrans for review and approval.

The municipality may also request that the value of the donation be applied toward the local share of the project as a "tapered match". Contact the VTrans Project Supervisor for more information on "tapered match".



PROJECT DESIGN (PHASE B) CHECKLIST

Preliminary (60%) Plan Development			
1. 2. 3. 4. 5. 6.	Investigate subsurface soils Coordinate utility relocations Develop erosion prevention & sediment control plan Determine stormwater permit requirements Property owners visits Obtain all permits (see permits & clearances checklist)		
Ri	ght-of-Way Plans & Acquisition		
8. 9. 10. 11. 12. 13. 14.	Develop right-of-way plans Obtain authorization to acquire (obligate federal ROW funds) Right-of-way plans & documents submitted & reviewed by VTrans Possible CE Re-evaluation (if changes to ROW) Obtain necessary appraisals Appraisal review by VTrans Negotiation & compensation Hold necessity & compensation hearings (if required) Obtain right-of-way certificate from VTrans		
Final (85%) Plan Development			
17. 18. 19. 20.	Obtain utility & railroad agreements Prepare special provisions Update final right-of-way plans Detailed bridge plans Provide material sampling & testing requirements VTrans reviews and comments on 85% plans		
Co	ntract Plans (100%)		
23. 24. 25. 26. 27. 27.	Check current environmental document (CE) Check all applicable permits Check right-of-way and utility clearance Certify design Provide detailed construction estimate VTrans reviews and approves Contract Plans, Specifications and Estimate (PS&E) Procure construction inspection and material testing services FHWA obligates federal construction funds VTrans gives a written authorization to advertise for bids		

Project Design (Phase B) is Complete / Construction (Phase C) Begins

NOTE: This checklist shows specific milestones and may not include all steps necessary in the development of the project. Please consult your VTrans Project Supervisor for guidance on all necessary steps.



CONSTRUCTION (PHASE C)

Introduction

This is what everyone has been working towards, construction of the project. This section will discuss the construction procurement process and will provide guidance to ensure the project meets federal and state regulations that must be adhered to in the bidding, award and construction of the project. Please refer to the Construction (Phase C) Checklist at the end of this section and if you have any questions contact the VTrans Project Supervisor.

Procurement Procedures for Construction

You are ready to procure construction services if you have the following:

A current Environmental Document (CE)
All applicable local, state and federal permits
Design certification
Right-of-way, utility and railroad agreements and clearances
Construction funds allocated
Approved Plans, Specifications and Estimate (PS&E)

With a few exceptions, all projects developed by municipalities will procure construction per 23 CFR 635. There are very specific rules attached to this process. An Invitation for Bids (IFB) is issued and an award is made based on the lowest responsive and responsible bid. Issuance of an IFB is the avenue for informing the contracting community that your municipality has a project to be constructed and that you are soliciting bids to complete this work. Any provisions necessary per 23 CFR 635 relative to awarding a contract must be clearly spelled out to potential bidders. Use the Invitation for Bids Checklist found in **Appendix T** to make sure everything is in place before you go out to bid.

Invitation for Bids

To assist in the proper procurement (bidding) of municipally managed construction projects the Municipal Assistance Bureau has developed "Contractor Bid Documents Invitation to Bid (IFB)" which include specific state and federally mandated provisions and attachments which can be found on the VTrans website at this link:

http://vtransengineering.vermont.gov/sections/ltf/general/guidebook.

Specific conditions apply to the bidding process. It is essential that these conditions be adhered to. The Invitation for Bids must be publicly advertised. In order to ensure competition, the IFB shall be posted by the municipality on the Vermont Bid System webpage which is found at the Vermont Business Assistance Network (VBAN) on the Vermont Agency of Commerce and Community Development website. Additionally the municipality shall post the solicitation in a least two (2) statewide, regional and/or local newspapers and/or state, regional or local websites. The IFB, plans and specifications shall be available to potential bidders for a minimum of three weeks prior to the opening of the bids. The bids shall be opened and read aloud at the specified time and place, if the bids cannot be opened and read aloud the reason for this shall be publicly announced at the opening. Bids submitted after the time specified for the submission of bids will be rejected and returned to the bidder unopened.

There cannot be any negotiations with contractors after the bid opening and before the award of the contract. A contract can only be signed with a contractor for the bid amount entered on the bid form. Negotiations are prohibited by federal regulation.

A sample construction contract is provided in **Appendix U**.

Mobilization / Demobilization

Federal Highway Administration (FHWA) does not allow withholding of retainage on construction contracts, instead mobilization and demobilization is used to ensure the work is completed and work area cleaned up after the project has been completed.

Mobilization covers the period from the beginning of the project to substantial completion. This would include the establishment of all contractor field offices, associated site work, and the movement of personnel, equipment, supplies, and incidentals to and from the project site.

Demobilization shall cover the period from substantial completion to completion and acceptance of the project. This would include the removal of all contractor field offices, buildings, and other facilities on the project and for all other work that must be performed which shall include project clean up, establishment of vegetation and completion of work that is not associated with a specific pay item.

For additional details on this specification, please consult the most recent edition of the Vermont Agency of Transportation's Standard Specifications for Construction available on the Agency's website at this link: http://vtranscontracts.vermont.gov/construction-contracting/2011-standard-specifications.

Prequalification of Construction Contractors

All prospective contractors bidding on a VTrans sponsored municipally managed project shall be on the Agency of Transportation's (annual) prequalified contractors list under the appropriate work category (ies) or shall have submitted a complete annual prequalification application to the Agency of Transportation, Contract Administration, a minimum of 10 working days prior to the bid opening and be found qualified to be added to the list prior to the award of the contract.

It is required that Project Specific Prequalification of construction contractors occur through the VTrans Prequalification Committee when the construction estimate is over \$1.5 million dollars.

For information on prequalification prospective bidders should contact the VTrans Prequalification Administrator in Contract Administration at 802-828-2643.

Construction Bonds

Municipality will need to include a Bid Bond, Compliance Bond and a Labor & Materials Bond in the contract (bid) documents. The following is an explanation of the three types of bonds:



Bid Bond or Security:

All bids must be accompanied by a negotiable bid guarantee which shall not be less than five percent (5%) of the amount of the bid. The bid guarantee may be a certified check, bank draft, U.S. Government Bonds at par value, or a bid bond secured by a surety company acceptable to the U.S. Government and authorized to do business in the State of Vermont. Certified checks and bank drafts must be made payable to the order of the municipality. The bid guarantee shall insure the execution of the contract and the furnishing of a method of assurance of completion by the successful bidder as required by the solicitation. Failure to submit a bid guarantee with the bid shall result in rejection of the bid. Proposal guarantees of the two lowest bidders that have submitted proposals that comply with all the provisions required to render them formal will be retained until the contract and bonds have been signed by all parties. Bid guarantees submitted by the remaining unsuccessful bidders will be returned as soon as practicable after bid opening. Should no award be made within thirty-one calendar days following the opening of bids, thirty-two if the thirty-first day is a state holiday, all proposals may be rejected and all guarantees may be returned.

Compliance Bond:

A Compliance Bond in an amount equal to one hundred percent (100%) of the total amount of the Bid is required. The compliance bond shall guarantee the faithful performance and completion of the work to be done under the contract as well as compliance with all provisions of the contract. The form of the bond shall be that provided by the Municipality, and the surety shall be acceptable to the State. The bonds shall be procured from an insurance company registered and licensed to do business in the State of Vermont.

Labor & Materials Bond:

A Labor & Materials Bond in an amount equal to one hundred percent (100%) of the total amount of the Bid is required. This Bond shall guarantee the payment in full of all bills and accounts for materials and labor used in the work as well as other obligations incurred in carrying out the terms of the contract. The form of the bond shall be that provided by the Municipality, and the surety shall be acceptable to the State. The bonds shall be procured from an insurance company registered and licensed to do business in the State of Vermont.

If the low bid contractor is unable to or refuses to enter into a contract or fails to furnish the required bonds, the amount of the bid bond or security shall be forfeited to the municipality as liquidated damages, not as a penalty. The amount of the bid bond or security shall not be forfeited to the municipality in the event the municipality fails to enter into a contract.

The low bid contractor shall deliver the required bonds to the municipality prior to execution of the contract.

Please see the "Contractor Bid Documents Invitation to Bid (IFB)" on the VTrans website at this link: http://vtransengineering.vermont.gov/sections/ltf/general/guidebook for examples of Compliance and Labor & Materials Bonds. Please contact the VTrans Project Supervisor if you have any questions or require any additional information on the bonding requirements for your



project.

Bid Opening

Bids are to be opened in a public forum and read aloud. A contract is awarded to the lowest responsive and responsible bidder for the amount of the bid. A responsible bidder is one who is physically organized and equipped financially to undertake and complete the contract. A responsive bid is one that meets all the requirements of the advertisement and proposal. A non-responsive bid does not need to be read aloud. Some common reasons why a bid might be found non-responsive are:

- failure to sign the bid and/or signature by the appropriate person
- failure to furnish any required bid bonds
- failure to include a unit bid price for each item
- failure to include a total amount for the bid
- failure to prepare the bid in ink
- failure to submit/sign a Debarment and Non-collusion Affidavit(CA-91)
- failure to submit/sign a EEO Certification (contracts of \$10,000 or greater)

To further assist in the bid opening process there is a "Bid Opening Checklist" in **Appendix Z**.

Bid Analysis

Following the opening of bids it is required on federal-aid construction projects that the unit bid prices of the apparent low bid be examined for reasonable conformance with the engineer's estimated prices. Bids that vary greatly from the estimate or demonstrate obvious unbalancing of unit prices shall be further reviewed.

Bids can be unbalanced in two ways: materially and mathematically. Mathematically unbalanced bids are individual price quotations that do not reasonably reflect actual costs. Materially unbalanced bids are ones that generate doubt that the award would result in the lowest ultimate cost. It is possible that bidders will purposely bid an unreasonably low cost to be deemed the low bidder and then, during construction, present evidence that they cannot supply the material or service at the quoted price and therefore request additional compensation. In other words, when preparing the bid, the bidder intentionally "underbids" in order to secure the construction project. Another possible scenario of material unbalance is that the bidder proposes a higher-than-average price for the items associated with mobilization of the project. Possible dangers from this scenario are that the contractor could be paid a substantial percentage of the project costs in the beginning and then find themselves in a position to not be able to complete the job and/or prioritize the job within their own workload. Should any irregularities be suspected, they should be discussed with the VTrans Project Supervisor and, if necessary, with the apparent low bidder who may be able to provide a reasonable explanation. VTrans guidance for conducting the bid analysis and a sample bid analysis award recommendation letter can be found in Appendix AA.

The Federal Highway Administration (FHWA) has guidance on bidding, bid review and analysis and awarding the contract which can be found at this link: http://www.fhwa.dot.gov/federal-aidessentials/catmod.cfm?id=5.



Authorization to Award Contract

Municipalities will need to prepare a bid summary for VTrans that lists the names of all the bidders and the amounts of the associated bids. In addition, a summary of the bid analysis results should be included. There needs to be Bid Analysis Summary Letter which states that the low bid offers no advantage to the contractor or disadvantage to the municipality and that the Town/City intends to award a contract to a specified contractor for the amount specified. The letter will have a designated space for the VTrans Project Manager to sign (concur with the recommendation). After the VTrans Project Manager has concurred with the bid analysis and summary, this will serve as written authorization for the municipality to enter into a contract with the low bidder. A Notice of Award letter shall be sent to the successful low bidder. Notification shall also be sent to the unsuccessful bidders. A sample Notice of Award letter can be found in **Appendix V**.

Additional information on the award of the contract can be found in the Municipal Assistance Bureau's "Contractor Bid Documents Invitation to Bid (IFB)" which can be found on the VTrans website at this link: http://vtransengineering.vermont.gov/sections/ltf/general/guidebook .

Protests - Bid Award

It is the intent of the project sponsor to award a contract to the lowest responsive and responsible bidder, conforming to specifications, provided the bid has been submitted in accordance with the requirements of the contract documents and does not exceed the funds available. If any bidder is aggrieved by the award, they may appeal in writing to the municipality and the appeal must be post-marked within seven (7) calendar days following the date of written notice to award the contract. There is specific language regarding award protests in the Municipal Assistance Bureau's "Contractor Bid Documents Invitation to Bid (IFB)" which can be found on the VTrans website at this link: http://vtransengineering.vermont.gov/sections/ltf/general/guidebook.

Constructing by Force Account

The only exception to competitive procurement of construction services is to construct by force account. This means a municipal, county or regional agency constructs the project or portion of the project by use of labor, equipment, materials and supplies furnished by them and used under their direct control. If the municipality anticipates obtaining goods or services outside of their own resources these goods and services must be obtained in a competitive manner as prescribed above. Written permission by VTrans must be received for work to be done by force account. Requests to consider force account construction should include:

- a project identification and description including the kind of work to be performed
- the estimated costs
- the estimated Federal funds to be provided
- the reasons that force account work is cost effective
- the demonstration that the municipal, county or regional agency is capable of doing the work completely and competently.



The Federal Highway Administration (FHWA) has guidance on selecting the method of construction, contracting versus force account, which can be found at this link: http://www.fhwa.dot.gov/federal-aidessentials/catmod.cfm?id=24.

Contractor Insurance Requirements

The successful contractor shall procure insurance from an insurance company registered and licensed to do business in the State of Vermont. Before the construction contract is executed, the contractor shall file with the municipality a certificate of insurance executed by the insurance company or its licensed agent(s) stating that with respect to the contract awarded each policy shall name the Municipality and the State of Vermont as additional insured for liabilities arising out of the contractor's actions, errors, and/or omissions under this contract. The Contractor shall carry insurance in accordance with the requirements that follow:

Workers Compensation Insurance

With respect to all operations performed, the contractor shall carry Workers Compensation Insurance in accordance with the laws of the State of Vermont. The contractor shall also ensure that all subcontractors carry Workers Compensation Insurance for all work performed by them.

Commercial General Liability Insurance

With respect to all operations performed by the Contractor and subcontractors, the Contractor shall carry Commercial General Liability Insurance providing all major divisions of coverage including, but not limited to:

- Premises Operations
- Independent Contractors' Protective
- Products and Completed Operations
- Personal Injury Liability
- Contractual Liability Applying to the Contractor's Obligations for Damage Claims, Broad Form Property Damage
- Collapse and Underground (CU) Coverage
- Explosion (X) Coverage, unless this requirement is waived in writing

Limits of Coverage shall be not less than those specified in the most recent version of the Municipal Assistance Bureau's "Contractor Bid Documents Invitation to Bid (IFB)" which can be found on the VTrans website at this link:

http://vtransengineering.vermont.gov/sections/ltf/general/guidebook.

Automobile Liability Insurance

The contractor shall carry Automobile Liability Insurance covering all motor vehicles, including owned, hired, borrowed and non-owned vehicles, used in connection with the project. Limits of Coverage shall be not less than those specified in the most recent version of the Municipal Assistance Bureau's "Contractor Bid Documents Invitation to Bid (IFB)" can be found on the VTrans website at this link: http://vtransengineering.vermont.gov/sections/ltf/general/guidebook.

Railroad Protective Liability Insurance

When the contract requires work on, over or under the right-of-way of any railroad, the contractor shall provide and file with the Municipality, with respect to the

operations that it or its subcontractor perform under the contract, Railroad Protective Liability Insurance for and on behalf of the railroad as named insured, with the Municipality and State of Vermont named as additional insured, providing for coverage limits of:

- (a) not less than two million dollars (\$2,000,000) for all damages arising out of any one accident or occurrence, in connection with bodily injury or death and/or injury to or destruction of property; and
- (b) subject to that limit per accident, a total (or aggregate) limit of six million dollars (\$6,000,000) for all injuries to persons or property during the policy period.

If such insurance is required, the contractor shall provide a certificate of insurance showing the minimum coverage indicated above to the Municipality prior to the commencement of rail-related work and/or activities, and shall maintain coverage until the work and/or activities is/are accepted by the Municipality

The contractor shall cooperate with and allow the railroad company or its agents free and full access to the project during construction with all materials and equipment necessary in order that their duly authorized employees or agents may do any and all railroad construction, inspection, flagging and watching. The contractor shall indemnify and save harmless the railroad and all of its officers, employees and agents against any claim or liability arising from or based on any delay to the contractor as a result of railroad construction or maintenance, whether by the company, its employees or agents.

General Insurance Conditions

The Workers Compensation Insurance, Contractors' Commercial General Liability Insurance and Automobile Liability Insurance shall be maintained in force until acceptance of the project by the municipality.

Under Contractors' Commercial General Liability Insurance, Products and Completed Operations Coverage shall be maintained in force for at least one year after the date of acceptance of the project.

The contractual liability insurance requirements detailed in these specifications and under the contract documents are to indemnify, defend and hold harmless the municipality and its officers, agents, representatives and employees, with respect to any and all claims, causes of action, losses, expenses, or damages resulting in death, bodily injury or property damage resulting from the actions, omissions, etc. of the contractor. Each policy shall name the municipality as an additional insured for the possible liabilities resulting from the contractor's actions or omissions. Umbrella Excess Liability Policies may be used in conjunction with primary policies to comply with any of the limit requirements specified above. "Claims-made" coverage forms are not acceptable without the prior written consent of the municipality. The Insurance Company shall agree to investigate and defend all claims against the insured for damages covered, even if groundless. Each policy furnished shall contain a rider or non-cancellation clause reading in substance as follows:

Anything herein to the contrary notwithstanding, no cancellation, termination or alteration of this policy by the company or the assured shall become effective unless and until notice of cancellation, termination or alteration has been given by registered mail to

the municipality at least 30 calendar days before the effective cancellation, termination or alteration date unless all work required to be performed under the terms of the contract is satisfactorily completed as evidenced by the formal acceptance by the municipality. There shall be no directed compensation allowed the contractor on account of any premium or other charge necessary to take out and keep in effect such insurance or bond, but the cost thereof shall be considered included in the general cost of the work.

Construction Inspection

The construction inspection firm needs to be on board prior to the preconstruction conference (see page 32 for additional information on procuring construction inspection services). Some of the duties and responsibilities of the inspection firm during construction can be found in the "Construction Inspection Check list" and the "Issues to Discuss with Construction Inspectors" both of which are in **Appendix AB**.

Preconstruction Conference

A preconstruction conference shall be held after the contract has been signed by all parties and prior to any work on the project by the contractor. The Municipal Project Manager or Construction Inspector will facilitate the preconstruction conference as well as prepare and distribute minutes to those who attend the meeting. The purpose of this meeting is to discuss details on the construction of the project and to bring up any comments or concerns. This is the perfect time to review all special provisions, check permit conditions, and clarify VTrans involvement. We have provided a Permits and Clearances Checklist to assure that all appropriate permits and clearances have been secured before construction begins which can be found in **Appendix X**.

The VTrans Project Supervisor will provide the necessary federally mandated "poster package" to the municipality at the preconstruction conference.

Mandatory attendance at the preconstruction meeting shall include the VTrans Project Supervisor or Manager, the Municipal Project Manager, a representative of the municipality, a representative of the contractor and the construction resident inspector. The municipality should also notify all affected utility companies, railroads and resource agencies such as the Agency of Natural Resources (ANR), the Army Corp of Engineers, etc. If the project requires a Highway Access Permit from VTrans, the Utilities and Permits Chief and District Transportation Administrator shall also be invited to the preconstruction conference.

To help in determining the items for discussion at the pre-construction conference a "Preconstruction Conference Check List" can be found in **Appendix AC**.

When all the required documentation is in place the Municipality will issue the contractor a Notice to Proceed, a sample of which can be found in **Appendix W**.

Off-Site Activities (formerly Waste, Borrow & Staging Areas)

It has been determined that the construction contractor's off-site activities are considered a part of a federal aid project with respect to environmental review and clearance. In order to allow contractors as much choice as possible in selecting those areas there is an agreement between the Agency of Transportation (VTrans) and the Federal Highway

Administration (FHWA) that the approval of the those sites will be done after the project construction contract is awarded. There are procedures outlined in Sections 105.25 through 105.28 of the VTrans Standard Specifications for Construction that detail coordination between the construction contractor and the Agency's Environmental Section in getting those sites approved prior to use by the contractor. There are specific requirements regarding the opening, permitting and use of off-site activities and a link to related documents in the most recent version of the Municipal Assistance Bureau's "Contractor Bid Documents Invitation to Bid (IFB)" on the VTrans website at this link:

http://vtransengineering.vermont.gov/sections/ltf/general/guidebook.

Additional information, frequently asked question (FAQ's) and forms for off-site activities can also be found in the VTrans website at this link:

http://vtransengineering.vermont.gov/sections/environmental/off_site_activity.

It is important to note that the contractor's off-site activities will need to include appropriate erosion prevention and sediment control measures. Additional permits may be required from the Agency of Natural Resources (ANR), ACT 250 or others.

Material Sampling, Testing and Certification

All projects funded with state and federal transportation funds need to have adequate construction supervision and inspection to insure the project is completed in conformance with approved plans and specifications. Projects receiving state and federal funding shall have the construction material sampling, testing and certification meet the requirements of the VTrans Standard Specifications for Construction, the VTrans Quality Assurance Program (QAP) and the VTrans Materials Sampling Manual. The Standard Specifications and related special provisions can be found on the VTrans website at this link: http://vtranscontracts.vermont.gov/construction-contracting. The QAP guide and Materials Sampling Manual can be found at this link: http://vtransengineering.vermont.gov/publications#pg.

The level of sampling, testing and material certification for each project will be determined by VTrans based on the Final (85%) Plans submittal from the Municipality and the requirements of the QAP. Upon receipt of Final (85%) Plans VTrans will develop a "Materials Sampling, Testing and Certification Package" which will be provided to the Municipality at the Preconstruction Conference.

New structural steel bridges or prestressed concrete units will require shop inspections. As plans are developed for the project, specific needs or requirements will be discussed. The VTrans Structures Section will provide all shop inspections, please contact the VTrans Project Supervisor to coordinate this work.

To ensure the construction sampling and testing is done per the VTrans requirements the municipality, when soliciting proposals for construction engineering, shall include in the scope of work that the Construction Inspection Firm will be responsible for arranging for independent testing services in accordance with the approved material sampling and testing plan. The engineer will then oversee the sampling and testing and will provide certification to the Municipal Project Manager for final acceptance.



Davis-Bacon Act

The Davis-Bacon Act is applicable to all construction contracts and related subcontracts when the construction will be occurring within Federal-aid system highway right-of-way.

Bid documents and contracts for all federal-aid projects covered by the prevailing wage requirements of the Davis-Bacon Act shall contain a schedule of wage rates as determined by the U.S. Department of Labor. The rates, including fringe benefits, must be incorporated in the contract specifications and are the minimum that must be paid to persons performing that class of labor on the project. These rates are published in the Federal Registry and are modified periodically. Current copies can be obtained from the VTrans Office of Civil Rights and Labor on their website at this link: http://vtranscivilrights.vermont.gov/doing-business/contractors-center/davis-bacon.

The wage rate schedule must be displayed on the project at a location convenient to all personnel prior to the beginning of any work on the project.

A certified copy of each weekly payroll must be submitted by the prime contractor and each subcontractor within seven days after the regular payment date thereof. The weekly payroll copy must be accompanied with a certificate of compliance indicating that the attached payroll is correct and complete. Payrolls must be complete. The prime contractor is responsible for the submittal of payrolls by subcontractors. All basic records pertaining to the payrolls must be preserved for a period of three years after the completion of the project. Entries to be checked on every payroll include:

- work classifications & title code for each employee
- hourly wage rates for each employee including fringe benefits
- daily and weekly total hours
- signed certification
- itemized deductions
- all approved deductions
- wage rates verified with those shown in the applicable contract

Entries that need to be checked on at least the first two payrolls include:

- arithmetical accuracy
- overtime computations
- wage rates verified with those shown in the wage schedule
- employee's full name, address and Social Security Number

Laborers and mechanics employed by the prime contractor and subcontractors are covered by the contract provisions, but employees of material suppliers are not. The prime contractor is responsible for violations of labor provisions by the subcontractors. Owner/Operators of non-hauling equipment are considered employees and must be included on the prime or subcontractors payroll. Owner/Operators of non-hauling equipment are covered by the labor standards provisions. Truck owner-operators are not considered subcontractors and are not covered by the labor standard provisions.



Equal Employment Opportunity

The Contractor is required to have an EEO & Affirmative Action Plan and to widely publicize it. Contractors must also have a Sexual Harassment Policy & Complaint procedure that all employees are made aware of. All AA/EEO/HARASSMENT policies and programs must be reviewed annually with all employees who hire and supervise personnel. The contractor should document recruitment efforts:

- o Keep copies of newspaper ads, letters, etc.
- Keep the Walk-In Applicant Log that is provided in the poster package at the job site to track on-site employment activity.
- Keep a list of female and minority recruitment sources Available on line and in OJT manual.

The contractor should maintain a working environment free of harassment and discrimination. The contractor is responsible for actions of own employees and the actions of any subcontractors with respect to sexual harassment and discrimination.

Prompt Pay Compliance

Vermont's Prompt Pay Statute requires payment from prime contractors to sub-contractors within 7 days of prime contractor receiving payment. Vermont State Statutes (VSA) Title 9 Section 4003c provides: "Notwithstanding any contrary agreement, when a subcontractor has performed in accordance with the provisions of its contract, a contractor shall pay a subcontractor, and each subcontractor shall in turn pay its subcontractors, the full or proportional amount received for each subcontractor's work and materials based on work completed or service provided under the subcontractor, seven days after receipt of each progress or final payment or seven days after receipt of the subcontractor's invoice, whichever is later."

Buy America Requirements

Buy America requirements of 23 CFR 635.410 are applicable to all federal-aid construction projects. All steel or iron products permanently incorporated into federal-aid projects, shall be products that have been entirely manufactured within the United States. All manufacturing processes of the steel or iron material, in a product, must occur within the United States to be considered of domestic origin. This includes process such as rolling, extruding, machining, bending, grinding, and drilling. The action of applying a coating to a material is deemed a manufacturing process subject to Buy America. Coating includes epoxy coating, galvanizing, painting, and any other coating that protects or enhances the value of the material.

This requirement does not prevent a minimal use of foreign materials, provided the cost of foreign materials used does not exceed 0.1 percent of the total contract price or \$2,500, whichever is greater. The cost of foreign steel or iron is defined as its value delivered to the project.

Changes in federal regulations as a result of MAP-21 have affected the application of Buy America, with specific changes related to utility relocations. The Federal Highway Administration (FHWA) has additional information and guidance on Buy America which can be found their website at this link: http://www.fhwa.dot.gov/construction/cqit/buyam.cfm.



Traffic Control

During the project development phase the level of traffic control (Traffic Management Plan) necessary for this project was determined. It is now the responsibility of the contractor to develop detailed information on the accommodation of traffic during construction. The details on the management of traffic can be found in the VTrans "Work Zone Safety and Mobility Guidance Document" and the "Appendix" which can found on the VTrans website at these links: http://vtransengineering.vermont.gov/sites/aot_program_development/files/documents/publications/WorkZoneSafetyMobilityGuidanceDocument.pdf,

 $\frac{http://vtransengineering.vermont.gov/sites/aot_program_development/files/documents/publicatio_ns/WorkZoneSafetyMobility%20Appendix%20A%20-%20Temp.%20Traffic%20Control%20Devices%209-12.pdf .$

Additionally if it is determined that the construction of the project is going to have an impact on the State Highway System or is going to cause a restriction in width then there are two additional forms that will need to be filled out and submitted to the VTrans project supervisor. The first form is an "Emergency Contact & 511 Information Input Form" and the second is a "Notification of Roadway Restrictions". These forms can be found in **Appendix AD**.

Stockpiled Materials

During construction the contractor may request to be paid for materials "stockpiled" on site. The VTrans Construction Specifications provide guidance on the payment of stockpiled materials in Section 106.09. A sample "Stockpiled Material Request" form can be found in **Appendix AE.**

Damages During Construction

Damages to the project may occur during construction. The payment for damages depends on the cause of the damage and if the contractor should be responsible for the damages or not. The VTrans Construction Engineer provided guidance to the Agency's construction personnel on this topic and this guidance is provided in **Appendix AF** for reference.

Change Orders

A change order is a written agreement between the contractor and the municipality covering work not otherwise provided for in the contract, revisions or amendments to the terms of the contract, including increases to the original quantities as set forth in the original contract proposal or conditions specifically described in the specifications as requiring a change order. Change orders constitute amendments to the contract once properly signed and executed.

During construction, it often necessary to make timely decisions in the field relative to change orders, including item overruns, which could increase the overall construction costs. It is expected that such changes will generally fall within the amount set as the maximum limiting amount (MLA) but there may be circumstances that could justify an increase to the MLA of the Grant Agreement. Most change orders are expected to be covered by the contingency portion of the MLA. If any change orders result in an increase to the MLA, then an amendment must be signed and executed prior to incurring costs above the previously established MLA.

Change orders are normally initiated by the contractor or the construction inspector. The construction inspector is the municipality's representative in the field. In order to initiate the



Www.icipal Assistance Bureau

change order process, the contractor and the construction inspector will need to provide justification, price, time to complete and a new completion date for all work.

It is important that the contractor and the construction inspector sign the change order and forward to the municipality for approval. The municipality will then sign the change order and forward to the VTrans Project Manager for review and approval as outlined below.

Amendments to the construction contract (i.e. implementation of the change order) cannot occur until after VTrans has signed off on the change order and provided authorization.

The following protocol will be used by VTrans in processing change orders for signature:

\$0 - \$50,000 will be approved by the VTrans Project Manager \$50,000 - \$100,000 will be approved by the Municipal Assistance Bureau Director \$100,000 and over will be approved by the VTrans Chief Engineer

It is necessary to provide a paper trail for audit purposes as VTrans is ultimately responsible for authorizing extra costs, tracking increased costs and initiating amendments to the Grant Agreement.

Please refer to the "Contractor Bid Documents Invitation to Bid (IFB)" on the VTrans website at this link: http://vtransengineering.vermont.gov/sections/ltf/general/guidebook for an example change order.

Claims Resolution

The municipality will follow the Claims Procedure as outlined in Section 105.20 of the VTrans Construction Specifications and as modified by the Special Provision in the in the most recent version of the Municipal Assistance Bureau's "Contractor Bid Documents Invitation to Bid (IFB)" on the VTrans website at this link:

http://vtransengineering.vermont.gov/sections/ltf/general/guidebook.

Final Inspection and Acceptance

A final inspection should be scheduled once a project is complete. The final inspection should include representatives from the contractor, the municipality, VTrans as well as the resident inspector. The project site will be thoroughly inspected for defects, incomplete work and needed changes. A punch list will be produced with the understanding that when the contractor completes the items on the punch list the project is complete and ready to be certified and accepted by the municipality.

Once the punch list is completed and the municipality is satisfied with the work, the municipality will certify and accept the project. The certification and acceptance letter, **Appendix AG**, may be taken from the Local Projects Guidebook and photo copied onto letterhead. The letter should be signed appropriately and submitted to the VTrans Project Supervisor. The payment of the final construction invoice shall be authorized once VTrans receives the completed certification and acceptance memo.



Grant Closeout

When all the work is done, all claims resolved and all permit conditions met the municipality shall prepare a "final" invoice that will cover any outstanding payments to the various firms and individuals who worked on the project, including any municipal charges. This will be submitted to the VTrans Project Supervisor accompanied by a letter from the Municipality indicating that all the work has been done and requesting that the grant be closed out. Once the grant is closed out no further requests for payment will be allowed. Please keep in mind all records must be retained for a minimum of 3 years from the date of the closeout request.



Municipal Assistance Bureau

necessary steps.

CONSTRUCTION (PHASE C) CHECKLIST

Invitation for Bids:					
1. 2. 3.	advertise for bids for a minimum of three weeks hold a public bid opening at a specified date and time summarize and analyze bid results with a statement of intent relative to the bid award VTrans reviews and concurs with bid analysis and authorizes award of contract				
Awar	Award and execution of construction contract:				
5. 6.	municipality executes contract with low bid contractor pre-construction conference held with appropriate parties				
Project Construction:					
	oversight by municipality (resident inspector) proposed off-site activities approved by VTrans shop drawing submittal & review materials sampling, testing and certification project final inspection				
Comp	Completion & Acceptance:				
13.	submittal and approval of donation credits, when applicable submittal of project certification & acceptance form submittal & payment of final invoice				
	This checklist shows specific milestones and may not include all steps necessary is ment of the project. Please consult your VTrans Project Supervisor for guidance of				

THE PROJECT IS COMPLETED

